

20010823.qrp v02_n290.qrl.20010823

Date: Thu, 23 Aug 2001 19:03:12 EDT

From: qrp-l@Lehigh.EDU

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: QRP-L digest 2290

QRP-L Digest 2290

Topics covered in this issue include:

- 1) [105483] Re: Iron on schematics
by "Rob Matherly" <kc0bom@yahoo.com>
- 2) [105484] OT: Straight keys wanted
by Stephen M Smith <sigcom@juno.com>
- 3) [105485] Dangit...
by "Rob Matherly" <kc0bom@yahoo.com>
- 4) [105486] Fox- Did I miss the N2WW log?
by Paul Womble <pwomble1@tampabay.rr.com>
- 5) [105487] 602's
by "w8diz" <w8diz@fpqrp.com>
- 6) [105488] Re: Iron on schematics
by "TC Dufresne" <tdufresne@neb.rr.com>
- 7) [105489] Re: Resonant vs. Nonresonant Antenna
by "Karl F. Larsen" <k5di@zianet.com>
- 8) [105490] Re: Portable SWL RX for CW??
by "TC Dufresne" <tdufresne@neb.rr.com>
- 9) [105491] IC502 manual
by David Heintzleman <pstrdave@kdsi.net>
- 10) [105492] Re: Portable SWL RX for CW??
by "Brian Murrey" <brian@iquest.net>
- 11) [105493] HDD disaster (Nigel, Ade, Karl K., the EICO schematics, SCRs, parts bags)
by "Ed Tanton" <n4xy@att.net>
- 12) [105494] Re: Portable SWL RX for CW??
by Phil Wheeler <w7ox@earthlink.net>
- 13) [105495] NEQRP CW Net, 23 August 01, 8:30 PM EDT, 3.565MHz
by Chuck Ludinsky <cjl@mitre.org>
- 14) [105496] Re: Dangit...
by "Rob Matherly" <kc0bom@yahoo.com>
- 15) [105497] Wilderness Alert: Arkansas High Point
by "David Bixler" <qrp@netins.net>
- 16) [105498] Re: Operating Manual
by "Jim FitzSimons" <cherry@getnet.net>
- 17) [105499] Re: Portable SWL RX for CW??
by "Jim FitzSimons" <cherry@getnet.net>
- 18) [105500] Re: Iron on schematics
by "Larry Przyborowski" <k3peg@yahoo.com>

- 19) [105501] Re: Iron on schematics
by "Dave Marling" <dbm@klis.com>
- 20) [105502] RE: Slingshots - a Slingshotologist's tip
by Bill Coleman <aa4lr@arrl.net>
- 21) [105503] Re: HDD disaster (Nigel, Ade, Karl K., the EICO schematics,
SCRs, parts bags)
by Dave Fouchey <dafouchey@home.com>
- 22) [105504] Re: HDD disaster (Nigel, Ade, Karl K., the EICO schematics,SCRs,
parts
bags)
by Phil Wheeler <w7ox@earthlink.net>
- 23) [105505] RE: HDD disaster (Nigel, Ade, Karl K., the EICO schematics, SCRs,
parts bags)
by "Ed Tanton" <n4xy@att.net>
- 24) [105506] Re: HDD disaster (Nigel, Ade, Karl K., the EICO
schematics,SCRs, parts bags)
by Dave Fouchey <dafouchey@home.com>
- 25) [105507] NE612/NE602/SA602
by CHARLES K BROWN <n4so@juno.com>
- 26) [105508] Re: grid-leak bias
by "Phil (VA3UX)" <phil@vaxxine.com>
- 27) [105509] Re: HDD disaster (Nigel, Ade, Karl K., the EICO schematics,SCRs,
parts
bags)
by Phil Wheeler <w7ox@earthlink.net>
- 28) [105510] Re: Iron on schematics
by "David Ek" <ekdave@earthlink.net>
- 29) [105511] Re: Dangit...
by "Rob Matherly" <kc0bom@yahoo.com>
- 30) [105512] Top of the world challenge
by "Niels" <nkristja@cadvision.com>
- 31) [105513] Nice collection antenna articles
by ARDUJENSKI@aol.com
- 32) [105514] Sangean \505 Not so Hot
by "Mike Duke" <k5xu@concentric.net>
- 33) [105515] New address for kc0bom
by "Rob Matherly" <kc0bom@arrl.net>
- 34) [105516] Re: Iron on schematics
by "ZOOM" <kandrparker@sympatico.ca>
- 35) [105517] Re: Portable SWL RX for CW??
by "ZOOM" <kandrparker@sympatico.ca>
- 36) [105518] 450 ohm standoffs
by ARDUJENSKI@aol.com
- 37) [105519] Here I sit lonely hearted...
by "N7SG K7FD" <k7fd@hotmail.com>
- 38) [105520] Re: Iron on schematics
by "ZOOM" <kandrparker@sympatico.ca>
- 39) [105521] 1 volt challenge

by Pete Burbank <plburbank@kih.net>

40) [105522] Re: Portable SWL RX for CW??
by "Leon Heller" <leon_heller@hotmail.com>

41) [105523] Re: Dangit...
by "Leon Heller" <leon_heller@hotmail.com>

42) [105524] FW: PSK-31 expedition to the BWCA: Updates
by "Don Snider" <dsnider@speakeasy.org>

43) [105525] OT: I'm back!
by Tim Pettibone <k5oi@cowboy.net>

44) [105526] RE: OT: I'm back!
by "John L. Sielke" <w2agn@pobox.com>

45) [105527] Re: Conversions (TenTec 13xx series)
by "Upton, Shawn" <SUpton@ALLEGROMICRO.com>

46) [105528] SST question
by "Upton, Shawn" <SUpton@ALLEGROMICRO.com>

47) [105529] Tnx: (rare) grid square?
by Frank Brickley <brickley@pobox.com>

48) [105530] Fwd: Request to mailing list TenTec rejected
by kcieslak <kcieslak@execpc.com>

49) [105531] Re: SST question
by Phil Wheeler <w7ox@earthlink.net>

50) [105532] RE: SST question
by "Upton, Shawn" <SUpton@ALLEGROMICRO.com>

51) [105533] Re: Resonant vs. Nonresonant Antenna
by RLemmel@aol.com

52) [105534] Need manual for HP 1745-A scope:
by "J. W. (Dub) Thornton" <dub@oklahoma.net>

53) [105535] Re: grid-leak bias
by MertNellis@aol.com

54) [105536] Re: Need manual for HP 1745-A scope:
by Pete Burbank <plburbank@kih.net>

55) [105537] Battery Charging
by "John Dorson" <JDORSON@worldshare.net>

56) [105538] Re: HDD disaster (Nigel, Ade, Karl K., the EICO schematics,SCRs,
parts
bags)
by Phil Wheeler <w7ox@earthlink.net>

57) [105539] Re: Using Double-Run Coax as Balanced Feeders?
by Bill Coleman <aa4lr@arrl.net>

58) [105540] Palm Radio Mini-Paddle update
by Johannes Hiller <HANNES@ulmnetz.de>

59) [105541] toroid wire question
by Bruce Ratray <rattray@gpfn.sk.ca>

60) [105542] Re: Battery Charging
by "Leon Heller" <leon_heller@hotmail.com>

61) [105543] Re: Battery Charging
by N1EU <n1eu@yahoo.com>

62) [105544] FOX--N6WG and NW7DX tonight

by "Bob Tellefsen" <n6wg@earthlink.net>
63) [105545] RE: Slingshots - a Slingshotologist's tip
by <schoon@amgt.com>
64) [105546] RE: Iron on schematics
by <schoon@amgt.com>
65) [105547] Re: Battery Charging
by "Jason Hissong" <jhisson1@columbus.rr.com>
66) [105548] Re: Slingshots
by "David Porter" <aa3ur@home.com>
67) [105549] Re: Iron on schematics
by "Mike Yetsko" <myetsko@insydesw.com>
68) [105550] Re: Slingshots
by "Mike Yetsko" <myetsko@insydesw.com>
69) [105551] Re: Where to find a 40673?
by Bill Coleman <aa4lr@arrl.net>
70) [105552] Re: Iron on schematics
by "ZOOM" <kandrparker@sympatico.ca>
71) [105553] Re: Iron on schematics
by "Mike Yetsko" <myetsko@insydesw.com>
72) [105554] Pens In H-P Plotters (was: Iron on schematics)
by "Kanalz, Karl" <Karl.Kanalz@allegiancetelecom.com>
73) [105555] Re: [GQRP] G5RV alternative ?
by Jeff <fantbb@yahoo.com>
74) [105556] Re: Pens In H-P Plotters (was: Iron on schematics)
by "ZOOM" <kandrparker@sympatico.ca>
75) [105557] Re: [GQRP] G5RV alternative ?
by ARDUJENSKI@aol.com
76) [105558] Re: Where to find a 40673?
by "Dave Benson" <nn1g@earthlink.net>
77) [105559] Re: [GQRP] G5RV alternative ?
by Frank Brickley <brickley@pobox.com>
78) [105560] Varactor MVAM109
by "w8diz" <w8diz@fpqrp.com>
79) [105561] Potting Material?
by ARDUJENSKI@aol.com
80) [105562] For Sale
by "Hartwell, Martin E, NLCIO" <mehartwell@att.com>
81) [105563] Re: 1 volt challenge
by Russ Hines <wb8zcc@one.net>
82) [105564] Re: Where to find a 40673?
by "Leon Heller" <leon_heller@hotmail.com>
83) [105565] Re: Varactor MVAM109
by "Steve .. k8pz" <k8pz@earthlink.net>
84) [105566] Re: Where to find a 40673?
by "Leon Heller" <leon_heller@hotmail.com>
85) [105567] Re: HDD disaster
by "Dave Marling" <dbm@klis.com>
86) [105568] Re: FOX--N6WG and NW7DX tonight

- by Pete Burbank <plburbank@kih.net>
- 87) [105569] Power Supply
by "Karl F. Larsen" <k5di@zianet.com>
- 88) [105570] Ten-Tec receiver kits sold
by "Hartwell, Martin E, NLCIO" <mehartwell@att.com>
- 89) [105571] [CONTEST]QRP Contest Calendar Aug 23/31
by Ken Newman <N2CQ@citnet.com>
- 90) [105572] Re: Potting Material?
by Pete Burbank <plburbank@kih.net>
- 91) [105573] Re: Slingshots
by "David Porter" <aa3ur@home.com>
- 92) [105574] Beacon data
by "Karl F. Larsen" <k5di@zianet.com>
- 93) [105575] Re: [GQRP] G5RV alternative ?
by "Tim A. King Jr." <iflyos@hotmail.com>
- 94) [105576] RE: Slingshots
by George Heron <gheron@safenet-inc.com>
- 95) [105577] Re: Slingshots
by ARDUJENSKI@aol.com
- 96) [105578] QRP Forum at the SW Division ARRL Convention..
by "Phinizy, William" <wphinizy@filenet.com>
- 97) [105579] Sling shot line
by Drbob92031@aol.com
- 98) [105580] HB - MH-101 SW-30+ audio stage
by n5ib@juno.com
- 99) [105581] Re: Where to find a 40673?
by "Mark J. Dulcey" <mark@buttery.org>
- 100) [105582] RE: Sling shot line
by <schoon@amgt.com>
- 101) [105583] Re: HB - MH-101 SW-30+ audio stage
by "Cla KA0GKC" <ka0gkc@arrl.net>
- 102) [105584] Re: Where to find a 40673?
by Bruce Muscolino <w6toy@erols.com>
- 103) [105585] Re: Sling shot line
by Bruce Muscolino <w6toy@erols.com>

Date: Wed, 22 Aug 2001 18:05:06 -0500
From: "Rob Matherly" <kc0bom@yahoo.com>
To: "Mike Yetsko" <myetsko@insydesw.com>, "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [105483] Re: Iron on schematics
Message-ID: <00af01c12b5e\$e4bd0e80\$8511a541@intern01>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Ah heck, I'll just stick with the scratch awl and the Sharpie!

72/73

Rob, kc0bom

----- Original Message -----

From: Mike Yetzko <myetzko@insydesw.com>

To: <kc0bom@yahoo.com>; Low Power Amateur Radio Discussion
<qrp-l@Lehigh.EDU>

Sent: Wednesday, August 22, 2001 5:44 PM

Subject: Re: Iron on schematics

> Laser printers and Xerox type machines use a 'toner'
> that is set by temperature. You can't do that with an
> 'ink jet' type printer which uses liquid that 'dries'.
>
> But you CAN take that 'ink jet' print to a copier and
> just 'copy' it to get a toner copy.
>
> One thing. MOST copiers do NOT copy exactly 100%.
> They either expand or contract the image just a bit. Will
> it be critical? Depends on the copier and what you're
> trying to do.
>
> If you copy from an Ink Jet to a toner copier, I'd put
> 'reference marks' on your original near the corners at
> about even inch spacing. Like two dots at the top,
> EXACTLY 7" apart. Then two at the bottom,
> EXACTLY 10" down from the top kind of thing.
> Then when you make a SINGLE copy, MEASURE
> your marks and see how close they are. Will it matter
> in most cases? Depends on what you're trying to
> 'lay out'. But if it's too far off, see if your copier can
> zoom in or out to compensate. Some will zoom at
> 1%, but some older ones only at 5% or even 10%
> steps. Some simple ones only zoom to specific
> steps. But some high end copiers have a linear zoom.
>
> Mike
>
> > Wow! Lots of useful info! I'm getting plenty of suggestions involving
> > laser printers and Xerox machines. Is there any way to use ink jet
> > printers?
> >
> > 72/73
> > Rob, kc0bom

>

Do You Yahoo!?
Get your free @yahoo.com address at <http://mail.yahoo.com>

Date: Wed, 22 Aug 2001 16:10:08 -0700
From: Stephen M Smith <sigcom@juno.com>
To: qrp-1@Lehigh.EDU
Cc: glowbugs@piobaire.mines.uidaho.edu, HEATH@interactive.tempe.gov
Subject: [105484] OT: Straight keys wanted
Message-ID: <20010822.161009.-16359963.1.sigcom@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I told Mike I would kick in an Ameco K-1 bakelite key. Who else has K-1s they'd like to donate? I would be willing to collect them and send them to him or whatever. My thought was it would be good to have all the same type of key and not one that has lots of parts to get lost/removed.

PLEASE RESPOND OFF LIST!, thanks.

73.....Steve 'The Scrounger' Smith
WB6TNL Oxnard, CA USA
Keep those soldering irons smokin' and "Snort Rosin"

----- Forwarded message -----
From: Mike K5MLC <K5mlc@AOL.COM>
To: HEATH@LISTSERV.TEMPE.GOV
Date: Wed, 22 Aug 2001 17:56:49 EDT
Subject: Straight keys

This is a bit off-topic but: Does anyone know where a poor middle school teacher can acquire 10-20 inexpensive straight keys for a beginning ham class?? I tried using computer generated code last year - but I think the kids would have more fun sending code to each other! Also, any ideas on setting up the keys with oscilators and headphones so that 2 students can practice sending and receiving with each other?

Any ideas ? Please email me "offline" at K5MLC@arrl.net Thanks for the bandwidth.

BTW I'll be needing some Heath help with my SB301/SB400 as soon as the Texas weather cools off enough that I can stand the work bench!

73

Mike K5MLC (School Club: N5CMS)

This list is a public service of the City of Tempe, Arizona

Subscription control - <http://www.tempe.gov/lists/control.asp?list=HEATH>
To post - HEATH@LISTSERV.TEMPE.GOV
Archives - <http://www.tempe.gov/archives/HEATH.html>

Date: Wed, 22 Aug 2001 18:22:26 -0500
From: "Rob Matherly" <kc0bom@yahoo.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [105485] Dangit...
Message-ID: <[00cd01c12b61\\$502e05a0\\$8511a541@intern01](mailto:00cd01c12b61$502e05a0$8511a541@intern01)>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Well, I hit a brick wall again. Anyone know where I can find an NE-612AN equivalent? I've checked Dan's Small Parts, Mouser, and Digi-Key. According to the QRP-F archives, the NE-612AN isn't in production anymore.

You'd think it'd be easy to find a part from a 3 year old schematic....

72/73

Rob, kc0bom

-My version of the Big Bang Theory:
 God snapped his fingers, and BANG! It happened.

=====
FPQrp #330; Qrp-L #2346; Live-Wire #442; ICQ #114690148
=====

I hate Jeff Gordon and the New York Yankees and I'm proud of it!

=====
Visit my ham radio / Mystery Science Theater 3000 website!

<http://www.geocities.com/kc0bom>

Go see it today!

=====

Are you a ham near the Lake Rathbun Iowa area? Join the club!

<http://clubs.yahoo.com/clubs/rathbunareahams>

=====

Use Drake ham radio equipment? Check out my group!

<http://groups.yahoo.com/group/drake-radio-operators>

Do You Yahoo!?

Get your free @yahoo.com address at <http://mail.yahoo.com>

Date: Wed, 22 Aug 2001 19:43:33 -0400

From: Paul Womble <pwomble1@tampabay.rr.com>

To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Subject: [105486] Fox- Did I miss the N2WW log?

Message-ID: <3B8443A5.576CBD38@tampabay.rr.com>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Have not seen Larry's 2nd log.

Did I miss it?

Paul K4FB

Date: Wed, 22 Aug 2001 19:41:33 -0400

From: "w8diz" <w8diz@fpqrp.com>

To: "QRP-L" <qrp-l@Lehigh.EDU>

Subject: [105487] 602's

Message-ID: <017a01c12b63\$fa810280\$39d81b41@cinci.rr.com>

MIME-Version: 1.0

Content-Type: text/plain;
charset="Windows-1252"

Content-Transfer-Encoding: 7bit

Hey gang,

Anybody looking for NE602's or NE612's or SA602's etc...

I have plenty at <http://kitsandparts.com>

72 & "oo's" - Dieter (DIZ) Gentzow - W8DIZ - Loveland, Ohio
Clermont County - EM79uf - near Cincinnati; 39.218N - 84.305W
SOC-8 DLQRPAG-1454 ARCI-10226 ARS-781 QRPL-1998 10X-9389 CATT-26
FP#-1 <http://home.cinci.rr.com/w8diz> & <http://kitsandparts.com>

----- Original Message -----

From: "Rob Matherly" <kc0bom@yahoo.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Wednesday, August 22, 2001 7:22 PM
Subject: Dangit...

Well, I hit a brick wall again. Anyone know where I can find an NE-612AN equivalent? I've checked Dan's Small Parts, Mouser, and Digi-Key. According to the QRP-F archives, the NE-612AN isn't in production anymore.

You'd think it'd be easy to find a part from a 3 year old schematic....

72/73

Rob, kc0bom

Date: Wed, 22 Aug 2001 23:43:20 +0100
From: "TC Dufresne" <tdufresne@neb.rr.com>
To: <kc0bom@yahoo.com>, "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [105488] Re: Iron on schematics
Message-ID: <001401c12b5b\$d821da00\$0dba1c41@neb.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Rob:

Been there done that.... Doesn't work because the ink won't transfer via thermal methods. There is an interesting alternative that I've been toying with (wink) There are old pin plotters around these days, costs hundreds of dollars when new, now can be had for a song on good old E-Bay. The HP 7475A springs into mind. If you can figure out a way to get the machine talking with your computer, you can print DIRECTLY TO A PCB. The prospect is fascinating, to me anyway, but I haven't found a way to get the darn thing

to talk to my computer! Someone out there knows what to do... Its a matter of getting the printer cable pinout just right... Thanks for reminding me!
Tom

----- Original Message -----

From: "Rob Matherly" <kc0bom@yahoo.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Wednesday, August 22, 2001 23:18 PM
Subject: Re: Iron on schematics

> Wow! Lots of useful info! I'm getting plenty of suggestions involving
> laser printers and Xerox machines. Is there any way to use ink jet
> printers?

>

> 72/73

> Rob, kc0bom

>

>

>

> -----
> Do You Yahoo!?

> Get your free @yahoo.com address at <http://mail.yahoo.com>

>

Date: Wed, 22 Aug 2001 18:04:06 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: Bill Coleman <aa4lr@arrl.net>
Cc: <k5di@zianet.com>, Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [105489] Re: Resonant vs. Nonresonant Antenna
Message-ID: <Pine.LNX.4.33.0108221555430.7909-100000@localhost.localdomain>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Bill your not being careful with your definitions. I like the Engineering approach that breaks the whole into parts that are more easy to study and understand. So here is what I like:

1. Antanna
2. Antenna feed point.
- 3, Feed Line
4. Antenna Tuner

5. Radio

Now look at a simple dipole in space that is $1/2$ wavelength and fed at the center. While it's true the feed point impedance is a pure resistance, this does NOT define that it's a $1/2$ wave dipole in space.

The feed line should be balanced since the antenna is balanced. We should use 70 ohm open line to best match the antenna. But then you need the antenna tuner to match the 70 ohms balanced to 50 ohms unbalanced.

Now in Real conditions the impedance of the dipole feedpoint will drop to near 50 ohms and so you can feed it with 50 ohm coax. You should put a balun at the feed point which can be 4 small ferrite beads slipped over the coax. Your radio will load this antenna fine and it will radiate a good signal launched at about 30 degrees above the horizon.

A 100 foot wire fed at the center with 450 ohm feedline will in general be mis-matched at the antenna and at the radio so you must have an antenna tuner to match the impedance at the tuner input to 50 ohms resistive at the output. If you do nothing at the antenna then the feedline will have a very high SWR and it will radiate, and to some extent heat up at points where the impedance is very low. This loss is small in open wire feedlines at HF frequencies. It can, and often does cause high voltage RF to appear at the antenna tuner, which can cause RF feedback to mikes and other things near the tuner.

Again, if we look at a resonant dipole, if you feed that with 450 ohm line, your putting a large mis-match $450/50 = 9:1$ SWR at the feed point. Depending on the length of the feed line, the impedance at the antenna tuner can be very high to very low. This puts a huge load on the tuner.

The G5RV, named after it's designer the late G5RV, is as he wrote not a very good antenna but it is easy to load on 20 meters where it's resonant, and also on all other Ham bands from 80 to 10 meters. This antenna is in wide use because a coax to coax tuner will work. He defines a 300 ohm feedline as 29 feet long which seems to keep the impedance matches within a reasonable bounds.

I like a 40 meter dipole that has switches at points that shorten the dipole so it's resonant at 30, 20, 17 and 15 meters, fed with 50 ohm coax with a balun at the feed point. A tuner is not required on any band.

--

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Thu, 23 Aug 2001 00:04:07 +0100
From: "TC Dufresne" <tdufresne@neb.rr.com>
To: <lhhousek@nvhbell.net>, "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [105490] Re: Portable SWL RX for CW??
Message-ID: <003001c12b5e\$befdaa60\$0dba1c41@neb.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

ou:

I have seen this question many times now and I will say again, in my opinion, FWIW, the Radio Shack DX-398 is hard to beat! I used it to make a QRP contact with Japan. I was using a homebrew two watter, and copying with my RS RCVR. Trust me, I was about as surprised as anyone when he actually came back to me!

I also use it as a RCVR for my Fireball 40 rig (what a gem- Thanks George!), my ARRL code work, and just about anything else when I can't or don't wanna fire up the old glowbug Drake.

I use a giant loop antenna, there may be a better one, but this one works for me.

As always, YMMV

73

Tom

Date: Wed, 22 Aug 2001 18:09:38 -0500
From: David Heintzleman <pstrdave@kdsi.net>
To: qrp-1@Lehigh.EDU
Subject: [105491] IC502 manual
Message-ID: <3B843BB2.15F0D74B@kdsi.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

will the Cuban ham to whom I sent copy of IC 502 manual and he did not receive it, please let me know his email capability, I could scan and send as attachments to email

Dave

K8BBM

Date: Wed, 22 Aug 2001 19:29:36 -0500
From: "Brian Murrey" <brian@iquest.net>
To: <tdufresne@neb.rr.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105492] Re: Portable SWL RX for CW??
Message-ID: <002001c12b6a\$b107f120\$7f382bd1@iquest.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I have used my DX440 for rcvr duty many times.

It works great.

I think the 398 and 440 are both Sangean products.

----- Original Message -----

From: "TC Dufresne" <tdufresne@neb.rr.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Wednesday, August 22, 2001 6:04 PM
Subject: Re: Portable SWL RX for CW??

> ou:
> I have seen this question many times now and I will say again, in my
> opinion, FWIW, the Radio Shack DX-398 is hard to beat! I used it to make a
> QRP contact with Japan. I was using a homebrew two watter, and copying
with
> my RS RCVR. Trust me, I was about as surprised as anyone when he actually
> came back to me!
> I also use it as a RCVR for my Fireball 40 rig (what a gem- Thanks
George!),
> my ARRL code work, and just about anything else when I can't or don't
wanna
> fire up the old glowbug Drake.
>
> I use a giant loop antenna, there may be a better one, but this one works
> for me.
> As always, YMMV
> 73
> Tom
>
>

Date: Wed, 22 Aug 2001 20:39:41 -0400
From: "Ed Tanton" <n4xy@att.net>
To: "QRP-L Reflector" <qrp-l@Lehigh.EDU>
Cc: "Boatanchors-Jack" <listown@nanniandjack.com>, "Boatanchors-Tempe" <BOATANCHORS@interactive.TEMPE.GOV>, "EICO Reflector" <eico@qth.net>, "Homebrew Reflector" <homebrew@qth.net>, "RACAL Reflector" <racal@qth.net>
Subject: [105493] HDD disaster (Nigel, Ade, Karl K., the EICO schematics, SCRs, parts bags)
Message-ID: <000401c12b6c\$1aa64090\$a00d4d0c@n4xy0>
MIME-Version: 1.0
Content-Type: text/plain;
charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Despite having two big drives, with Outlook on one, and a backup (outlook.pst) on the other, I recently suffered the 'BLUE SCREEN of DEATH' with my (total of) 60GB WIN 2000 PRO system. This, despite McAfee Active Shield and Zonelabs Pro-protection. BOTH hard-drives had lost their partitions. Primary losses would have included all my EXCEL Tax Files for the past 10 years; HR files; all my best (and I might add: legitimate) working software like OFFICE 2000 Premium etc. etc. ad infinitum/ad nauseum.

Despite a 36 hour struggle, including a new motherboard, HDD, and WIN 2K boot on that new HDD, they were NOT recoverable with any and all measures known to me after a lot of years of this. Enter a company named: DTI Data <www.dtidata.com> . It wasn't cheap: for WIN 2000 Pro: \$250. They actually emailed (to my wife's office-this cpu being mine) a small program that promptly recovered ~ 75% of 2 out of 3 of the partitions. The original WIN 2K PRO partition wasn't there because yours truly didn't know that ANYTHING-short of an HDD platter swap in a Class-whatever cleanroom-could recover partitions once the 'usual' set of remedies had been tried... So I had tried formatting THAT NTFS partition in hopes of recovering the other 2. No dice.

The short of it is that I DID get the tax files, but did not get any of my emails* or program registrations, or URL-links back. The ' * ' is because there was-for some unknown reason-a copy of outlook.pst that was current through DEC 31, 2000 (perhaps a moment of Y2K fever prompted a separate backup?) Anyway, that got me a lot of historical stuff, along with my basic email folder structure, but...

If I was supposed to send you anything (remember those small SCR/goodie bags I am so late on? Well I do.) And Ade... there was something for you... As well as several other guys for schematics, parts, whatever.

Also Karl K. And Nigel. All my EBAY stuff was lost too. None of this stuff was for money, but I said I would do it, and now I can't. So, let me hear from you, please. Especially Nigel-I don't have ANYTHING in print, not the phone nr, nor your email address.

My apologies for the BW, but this is the only way to do this in a reasonably timely fashion.

P.S. The system is up and running, mostly re-registered, with the website being reverse-loaded from my ISP (QSL.NET). The cause remains unknown.

73 Ed Tanton N4XY <n4xy@arrl.net>

website: <<http://www.qsl.net/n4xy/>>

Ed Tanton N4XY
189 Pioneer Trail
Marietta, GA 30068-3466

Date: Wed, 22 Aug 2001 17:47:43 -0700
From: Phil Wheeler <w7ox@earthlink.net>
To: tdufresne@neb.rr.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [105494] Re: Portable SWL RX for CW??
Message-ID: <3B8452AF.D7363E72@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

TC Dufresne wrote:

>
> ou:
> I have seen this question many times now and I will say again, in my
> opinion, FWIW, the Radio Shack DX-398 is hard to beat! I used it to make a
> QRP contact with Japan. I was using a homebrew two watter, and copying with
> my RS RCVR. Trust me, I was about as surprised as anyone when he actually
> came back to me!

I've got the equivalent Sangean (ATS-909) and find it to be a very good receiver. I've also added the improved filters from Kiwa.

73, Phil W7OX

Date: Wed, 22 Aug 2001 20:57:03 -0400
From: Chuck Ludinsky <cjl@mitre.org>
To: neqrp@jonal.net, qrp-1@lehigh.edu
Subject: [105495] NEQRP CW Net, 23 August 01, 8:30 PM EDT, 3.565MHz
Message-ID: <3B8454DF.761AE61C@mitre.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The New England QRP Club's WQ1RP CW net meets again Thursday night, 23 August 2001, at 8:30 PM EDT (0030Z, 24 August 01) on or near 3.565 MHz. Net control operator for this week's 80M session will be Chuck, K1CL, operating from Chelmsford, MA.

With generally good conditions and excellent signal reports, last week's net had a total of eight checkins:

AE5X	John	Hewitt, NJ	599
KA3WMJ	Ken	Erwinna, PA	599
W1KRT	Ken	Springfield, NH	599
W2BVH	Lenny	Cranford, NJ	599
W2APF	Thaire	N/A	N/A
AE4IC	Bob	Greensboro, NC	599
N1ZSW	Ron	Worcester, MA	579
K1CL	Chuck	Chelmsford, MA	NCO

Although Thaire responded to the QNI, and had a strong signal into eastern MA, we apparently lost him before he was called up.

Join in the fun, stop by and say hello to the gang Thursday night.

73 DE K1CL
Chuck

Date: Wed, 22 Aug 2001 20:04:52 -0500
From: "Rob Matherly" <kc0bom@yahoo.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [105496] Re: Dangit...
Message-ID: <006c01c12b6f\$a2c888e0\$8611a541@intern01>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Hi All;

Got the sub number, and several places to locate it. Thanks a bunch all!

72/73

Rob, kc0bom

Do You Yahoo!?

Get your free @yahoo.com address at <http://mail.yahoo.com>

Date: Wed, 22 Aug 2001 20:15:27 -0500
From: "David Bixler" <qrp@netins.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105497] Wilderness Alert: Arkansas High Point
Message-ID: <DBEPKBJH00EAHCKKIHPFOE0ECFAA.qrp@netins.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Greetings gang:

Layne, (WD0DDU) and I (W0CH) are planning to activate the highest point in the state of Arkansas this Saturday, August 25th. This operation is part of the Adventure Radio Society's High Point Challenge where outdoor radio enthusiasts are endeavoring to activate the highest points in all 50 states and Canadian provinces.

We are hiking to the summit of Magazine Mountain, elevation 2753 feet, and will have both a 20 meter and a 40 meter station on the air.

Our operation will generally coincide with the Arizona ScQRPions BUBBA 2001 contest, 1800Z-2200Z and we will provide our temperature for BUBBA testers. However we will gladly QSO all hams.

Should we arrive early, watch for us before 1800Z on the usual QRP 20 and 40 meter frequencies. We will be

in Logan County for any QRP county hunters.

72,

Dave

David Bixler W0CH
Seneca, MO
Main Web Site: <http://www.qsl.net/w0ch>
Mirror Site: <http://showcase.netins.net/web/w0ch>

QRP: Little Radios, Big Fun!

Date: Wed, 22 Aug 2001 18:17:54 -0700
From: "Jim FitzSimons" <cherry@getnet.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105498] Re: Operating Manual
Message-ID: <006001c12b71\$70273100\$8522893f@pavilion>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I have the 7th edition of the operating manual.
It is dated 2000.
Jim FitzSimons W7ANF

----- Original Message -----
From: "Kenneth Hoglund" <hoglund@wfu.edu>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Wednesday, August 22, 2001 14:32 PM
Subject: Operating Manual

> Gang--
>
> I'm fortunate to have relatives in the Newington area who wanted to get
> me something 'useful' for a gift: The 6th ed of the Operating Manual.
>
> Contains lots of information of a pretty basic nature, starting with
> SWLing, Basic Operating, Awards and running up to Digital
> Communications, Satellites, Traffic Handling, etc. About 408 pages of
> very useful information, explained in a down-to-earth style, just about
> right for me. Also includes a 24 page smaller-sized "Ham Desktop
> Reference" thing that I keep near the rig with DX callsigns, band plans,

> etc. Nice!
>
> Probably if you've been at a particular form of operating for awhile,
> the Manual would be too basic. But if you're getting into something new,
> or like me are pretty new to the whole field, this is a lot less
> intimidating than the Handbook.
>
> I think the latest version is the 7th ed.
>
> Usual disclaimers apply.
>
> 73
> Ken KG4FGC

Date: Wed, 22 Aug 2001 18:23:44 -0700
From: "Jim FitzSimons" <cherry@getnet.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [105499] Re: Portable SWL RX for CW??
Message-ID: <009d01c12b72\$41269c00\$8522893f@pavilion>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I have a DX-440. I use for a monitor at home also.
It does overload with a large antenna.
Jim FitzSimons W7ANF

----- Original Message -----
From: "Brian Murrey" <brian@iquest.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Wednesday, August 22, 2001 17:29 PM
Subject: Re: Portable SWL RX for CW??

> I have used my DX440 for rcvr duty many times.
>
> It works great.
>
> I think the 398 and 440 are both Sangean products.
>
>
> ----- Original Message -----
> From: "TC Dufresne" <tdufresne@neb.rr.com>

> To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
> Sent: Wednesday, August 22, 2001 6:04 PM
> Subject: Re: Portable SWL RX for CW??
>
>
> > ou:
> > I have seen this question many times now and I will say again, in my
> > opinion, FWIW, the Radio Shack DX-398 is hard to beat! I used it to make
a
> > QRP contact with Japan. I was using a homebrew two watter, and copying
> with
> > my RS RCVR. Trust me, I was about as surprised as anyone when he
actually
> > came back to me!
> > I also use it as a RCVR for my Fireball 40 rig (what a gem- Thanks
> George!),
> > my ARRL code work, and just about anything else when I can't or don't
> wanna
> > fire up the old glowbug Drake.
> >
> > I use a giant loop antenna, there may be a better one, but this one
works
> > for me.
> > As always, YMMV
> > 73
> > Tom
> >
> >
>
>

Date: Wed, 22 Aug 2001 21:25:50 -0400
From: "Larry Przyborowski" <k3peg@yahoo.com>
To: <tdufresne@neb.rr.com>, "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [105500] Re: Iron on schematics
Message-ID: <007101c12b72\$8ce0e6a0\$2ceefea9@athlon>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Here's your answer --> <http://www.colba.net/~jacbro/index/pcb/pcbe.html>

73, Larry

Do You Yahoo!?

Get your free @yahoo.com address at <http://mail.yahoo.com>

Date: Wed, 22 Aug 2001 22:56:58 -0300
From: "Dave Marling" <dbm@klis.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105501] Re: Iron on schematics
Message-ID: <007c01c12b76\$e5dd37a0\$c9aae2d1@klis.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I recently had to make a couple of PIC boards to automate a small water pumping system for a local fish plant. It's been many a year since I had to make a pcb without benefit of a company facility.

Several members on the qrp-canada reflector directed me to sites with information on laser printer transfers. After a bit of experimentation I found that printing to 720dpi photo quality ink jet paper on the laser printer set to its maximum dpi setting worked very well. Lower dpi photo paper may work as well - I didn't have any to try.

One board required a bit of very minor cleaning up with a razor knife because I didn't get all the paper fibers removed after the toner transfer.

I'm very impressed with this method of small quantity board production. Sure beats coatings of sensitizer chemicals and UV exposure lights.

73,
Dave
VE1VQ

PS. For those on here who sent me info re pcb drawing programs - thanks! I've been playing with them as time permits.

Date: Wed, 22 Aug 2001 21:59:49 -0400
From: Bill Coleman <aa4lr@arrl.net>
To: <schoon@amgt.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [105502] RE: Slingshots - a Slingshotologist's tip
Message-ID: <20010823020047.WFCM10769.imf02bis.bellsouth.net@[192.168.0.20]>
Mime-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

On 8/20/01 1:42 PM, schoon@amgt.com at schoon@amgt.com wrote:

>I disagree on the spool in front - as I've been a victim of the line
>snagging and the weight returning back to me at high velocity... Also,
>aiming can be difficult with the drag on the line coming from a
>different direction than where the shooter is firing... The safest way
>is to use a closed face fishing reel - ala Zebco 404 type mounted right
>in line with the release point of the sling..... Makes for better
>aiming...

I used to use a closed-face fishing reel, but found that an open-face
reel offers less resistance.

I *ALWAYS* wear full eye-protection (eg goggles ON TOP of my glasses)
when using the slingshot. Sometimes, I'll wear a hard-hat as well.

Bill Coleman, AA4LR, PP-ASEL Mail: aa4lr@arrl.net
Quote: "Not within a thousand years will man ever fly!"
 -- Wilbur Wright, 1901

Date: Wed, 22 Aug 2001 22:00:24 -0400
From: Dave Fouchey <dafouchey@home.com>
To: n4xy@att.net, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [105503] Re: HDD disaster (Nigel, Ade, Karl K., the EICO schematics,
 SCRs, parts bags)
Message-ID: <4.1.20010822215835.00993df0@localhost>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Ed this is the exact reason I put in a CD-RW drive in my PC. So I could
back up critical stuff fairly cheaply. Especially the Tax doc's..something
to consider.

Good luck.

Dave
WA4EMR/8

At 08:39 PM 8/22/2001 -0400, Ed Tanton wrote:

>Despite having two big drives, with Outlook on one, and a backup
>(outlook.pst) on the other, I recently suffered the 'BLUE SCREEN of
>DEATH' with my (total of) 60GB WIN 2000 PRO system. This, despite
>McAfee Active Shield and Zonelabs Pro-protection. BOTH hard-drives had
>lost their partitions. Primary losses would have included all my EXCEL
>Tax Files for the past 10 years; HR files; all my best (and I might add:
>legitimate) working software like OFFICE 2000 Premium etc. etc. ad
>infinitem/ad nauseum.

>

>Despite a 36 hour struggle, including a new motherboard, HDD, and WIN 2K
>boot on that new HDD, they were NOT recoverable with any and all
>measures known to me after a lot of years of this. Enter a company
>named: DTI Data <www.dtidata.com> . It wasn't cheap: for WIN 2000 Pro:
>\$250. They actually emailed (to my wife's office-this cpu being mine) a
>small program that promptly recovered ~ 75% of 2 out of 3 of the
>partitions. The original WIN 2K PRO partition wasn't there because yours
>truly didn't know that ANYTHING-short of an HDD platter swap in a
>Class-whatever cleanroom-could recover partitions once the 'usual' set
>of remedies had been tried... So I had tried formatting THAT NTFS
>partition in hopes of recovering the other 2. No dice.

>

>The short of it is that I DID get the tax files, but did not get any of
>my emails* or program registrations, or URL-links back. The ' * ' is
>because there was-for some unknown reason-a copy of outlook.pst that was
>current through DEC 31, 2000 (perhaps a moment of Y2K fever prompted a
>separate backup?) Anyway, that got me a lot of historical stuff, along
>with my basic email folder structure, but...

>

>If I was supposed to send you anything (remember those small SCR/goodie
>bags I am so late on? Well I do.) And Ade... there was something for
>you... As well as several other guys for schematics, parts, whatever.
>Also Karl K. And Nigel. All my EBAY stuff was lost too. None of this
>stuff was for money, but I said I would do it, and now I can't. So, let
>me hear from you, please. Especially Nigel-I don't have ANYTHING in
>print, not the phone nr, nor your email address.

>

>My apologies for the BW, but this is the only way to do this in a
>reasonably timely fashion.

>

>P.S. The system is up and running, mostly re-registered, with the
>website being reverse-loaded from my ISP (QSL.NET). The cause remains
>unknown.

>

>73 Ed Tanton N4XY <n4xy@arrl.net>

>

>website: <<http://www.qsl.net/n4xy/>>

>
>Ed Tanton N4XY
>189 Pioneer Trail
>Marietta, GA 30068-3466

Date: Wed, 22 Aug 2001 19:13:34 -0700
From: Phil Wheeler <w7ox@earthlink.net>
To: dafouchey@home.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [105504] Re: HDD disaster (Nigel, Ade, Karl K., the EICO schematics,SCRs,
parts
bags)
Message-ID: <3B8466CE.5296F151@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Dave Fouchey wrote:

>
> Ed this is the exact reason I put in a CD-RW drive in my PC. So I could
> back up critical stuff fairly cheaply. Especially the Tax doc's..something
> to consider.
>

Dave,

What software do you use? I believe there are programs that will automate such a backup, but I don't know what they are. Given my fast Plextor CD writer and 700 MB CD-Rs (and a relatively small 8.4 GB HDD on this machine), it would not take all that long. Laptop would take longer (15 GB) but I can do it across my LAN to the Plextor.

Since this is bigtime OT, you may want to reply direct.

73, Phil W7OX

Date: Wed, 22 Aug 2001 22:13:35 -0400
From: "Ed Tanton" <n4xy@att.net>
To: <dafouchey@home.com>, "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>

Subject: [105505] RE: HDD disaster (Nigel, Ade, Karl K., the EICO schematics, SCRs, parts bags)

Message-ID: <004201c12b79\$400a2b50\$a00d4d0c@n4xy0>

MIME-Version: 1.0

Content-Type: text/plain;
charset="US-ASCII"

Content-Transfer-Encoding: 7bit

You are SO-O-O right Dave! Had the CD-RW drive... thought the 2-drive (3 partition) setup was safe. Wasn't. The tax records and 'old' outlook.pst are on a CD. 1st thing I did after recovery and CD-RW system installation.

73 Ed Tanton N4XY <n4xy@arrl.net>

website: <www.n4xy.com>

Ed Tanton N4XY
189 Pioneer Trail
Marietta, GA 30068-3466

///snip

Ed this is the exact reason I put in a CD-RW drive in my PC. So I could back up critical stuff fairly cheaply. Especially the Tax doc's..something to consider.

Good luck.

Dave
WA4EMR/8
///snip

Date: Wed, 22 Aug 2001 22:20:32 -0400
From: Dave Fouchey <dafouchey@home.com>
To: Phil Wheeler <w7ox@earthlink.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [105506] Re: HDD disaster (Nigel, Ade, Karl K., the EICO schematics, SCRs, parts bags)
Message-ID: <4.1.20010822221910.009a0490@localhost>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I do it manually and selectively but you should be able to automate it, just not sure what tools to use to do so.

Anybody have any ideas?

Dave
WA4EMR/8

At 07:13 PM 8/22/2001 -0700, Phil Wheeler wrote:

>
>
>Dave Fouchey wrote:
>>
>> Ed this is the exact reason I put in a CD-RW drive in my PC. So I could
>> back up critical stuff fairly cheaply. Especially the Tax doc's..something
>> to consider.
>>
>
>Dave,
>
>What software do you use? I believe there are programs that will
>automate such a backup, but I don't know what they are. Given my fast
>Plextor CD writer and 700 MB CD-Rs (and a relatively small 8.4 GB HDD on
>this machine), it would not take all that long. Laptop would take
>longer (15 GB) but I can do it across my LAN to the Plextor.
>
>Since this is bigtime OT, you may want to reply direct.
>
>73, Phil W70X

Date: Wed, 22 Aug 2001 23:03:06 EDT
From: CHARLES K BROWN <n4so@juno.com>
To: qrp-l@lehigh.edu
Subject: [105507] NE612/NE602/SA602
Message-ID: <20010823.030110.7503.2.n4so@juno.com>

The following is a saved text file.
Applies to the NE-612 as well.
Some lines were edited due to line formatting.
Archive qrp-l/components, file tn.ne602.
Part 1/1, total size 3924 bytes:

From: paul Harden <pharden@aoc.nrao.edu>

Subject: DATA SHEET: NE602

Date: Wed, 5 Jul 1995 17:45:40 EDT

[QRP Tech Note Series de NA5N] DATA SHEET:

NE602/SA602 DOUBLE BALANCED MIXER AND OSCILLATOR

Manufactured by Signetics (Info from Signetics Data Book, pg. 4-69+)

[The NE602 was designed initially for the cellular telephone industry.

Some information from the data sheets not applicable to QRP or general HF work is omitted. -NA5N] -

**** PIN-OUT ****

* Low current, 2.4mA typical INPUT A --(1)-| |-(8)-- Vcc
* Excellent noise figure <5dB INPUT B --(2)-| |-(7)-- OSC. OUT
* Excellent gain, intercept GND --(3)-| |-(6)-- OSC. IN
and sensitivity OUTPUT A --(4)-| |-(5)-- OUTPUT B

* Low external parts count

NE602N: 8-pin plastic DIP for 0 to 70C

****APPLICATIONS** SA602N: 8-pin plastic DIP for -40 to 85C

* Mixer/Oscillator NE602F: 8-pin ceramic DIP for 0 to 70C *

Portable radio/transceivers

* HF/VHF frequency conversion ****DESCRIPTION** The SA/NE602 is a low-power VHF monolithic double-balanced mixer with input amplifier, on-board oscillator

, and voltage regulator. It is intended for high performance, low power communication systems. The mixer is a "Gilbert Cell" multiplier configuration

which typically provides +18dB gain at 45MHz. The oscillator will operate to

200MHz. It can be configured as a crystal oscillator, a tuned tank oscillator

or a buffer for an external L.O. The noise figure at 45MHz is typically less

than 5dB. The gain, intercept performance, low-power and noise characteristics

make the SA/NE602 a superior design choice for high- performance battery operated equipment.

****ABSOLUTE MAXIMUM RATINGS** Vcc Max. operating voltage 9 vdc

 Tstg Storage temperature -65C to +150C Ta

 Operating temperature range

 NE602 0C to +70C (degrees)

 SA602 -40C to +85C

****AC/DC ELECTRICAL CHARACTERISTICS** at Ta=25C, Vcc=6v

 Vcc Power supply voltage range 4.5v (min) to 8.0v (max)

 DC current drain 2.4mA(typ) to 2.8mA(max)

 Fin Input signal frequency 500MHz (typical)

 Fosc Oscillator frequency 200MHz (typical)

 Noise figure at 45MHz 5.0dB(typ) to 6.0db(max)

 Conversion gain at 45MHz 14dB (min) 18dB(typ)

 Rin RF input resistance 1.5K (min) Cin RF input

capacitance

3pF (typ) to 3.5pF (max) Ro

Mixer Output resistance 1.5K (typ) (pins 4 or 5)

The SA602 is capable of receiving -119dBm signals with a 12dB S/N ratio at

45MHz in cellular telephone applications.

[Lab tests shows the NE602 is ~-122dBm @7mHz; -118dBm @10.1MHz -NA5N]

**DESIGN NOTES (From data sheet and personal experience)

1. RF inputs (pins 1,2) are biased internally; they are symmetrical and can be used interchangeably, but do not bias externally.

[AC coupled only or from LC tuned circuit or transformer].

2. Mixer outputs (pins 4,5) also internally biased, connected to Vcc through internal 1.5K resistors.

[They can thus be used as single ended output without upsetting the balance

of the mixer].

3. Oscillator capable of sustaining oscillation beyond 200MHz in crystal or

tuned tank circuits.

[External L.O. injection should be at least 200mV, such as for the TX mixer

or BFO for a product det.]

4. [When stealing oscillator power from pin 7 to another circuit, an FET or transistor buffer should be used for minimum loading and isolation].

5. [In early 1995, single unit costs from mail order vendors for a NE602N was about \$3.00 each].

72/73 de NA5N (pharden@nrao.edu)

nnnn

GET INTERNET ACCESS FROM JUNO!

Juno offers FREE or PREMIUM Internet access for less!

Join Juno today! For your FREE software, visit:

<http://dl.www.juno.com/get/tagj>.

Date: Wed, 22 Aug 2001 23:00:49 -0400

From: "Phil (VA3UX)" <phil@vaxxine.com>

To: Qrp-1@Lehigh.EDU

Subject: [105508] Re: grid-leak bias

Message-ID: <5.0.2.1.0.20010822225050.009f4d90@vaxxine.com>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"; format=flowed

At 08:43 AM 8/22/2001 -0600, you wrote:

>I think the operative word here, is who cares? Perhaps someone who needs
>25 KW of power, but that's not QRP...:-) I learned about tubes in 1959 but
>when I started working they handed me transistors like the 2n44 and said
>make it work with these.

Somewhat short sighted comments. That good little tutorial on grid leak
applies quite well to QRP. There are plenty of great little qrp
transmitter and receiver projects on the web and in books that use vacuum
tubes. Those projects all make use of grid leak resistors - standard "meat
and potatoes" for vacuum tube stuff. Second, there are no modern 25 KW
transmitters (or 2 KW or 500 watt transmitters for that matter) that use
grid leak resistors. Grid leak and grid bias are not necessarily the same
thing.

That was a good post and the info is quite usable by qrp'ers that also use
vacuum tubes.

Phil

>On Wed, 22 Aug 2001, Tony Fishpool wrote:

>

> > Charles,

> > I kind of remember it differently but it was over 20 years ago I last
> > played with these things so I am willing to stand corrected.

> >

> > Isn't the DC bias derived from the fact that the cathode is raised above
> > zero volts by the cathode resistor and is therefore positive with
> > respect to the grid. Why? because the grid isn't drawing any current,
> > and therefore even though the grid resistor is fairly large, there isn't
> > any volts dropped across it and is therefore at zero volts - but more
> > importantly, negative with respect to the cathode. (positive w.r.t. the
> > cathode being a bad thing because it then becomes an anode!)

> > You make sure that the bias point doesn't change with an AC input by
> > adding a capacitor across the cathode resistor.

> >

> > <groan!> This was all too long ago :-)

> >

> > Kind regards

> > Tony - G4WIF

> >

> >

> > ----- Original Message -----

> > From: <W2SH@aol.com>

> >

> >

> > > Dave,

> > >
> > > This was a useful tutorial.
> > >
> > > Trusting only my memory, and without
> > > taking the time to consult any written
> > > references, I think that with grid leak bias
> > > the voltage is developed from
> > > the driving power across the grid resistor,
> > > whereas the voltage developed
> > > (usually across several megohms, as you
> > > point out) by electrons striking the
> > > grid on their way to the plate is called
> > > contact potential bias.
> >
> >
> >
> >
> >
>
>--
>Yours Truly,
>
> - Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Wed, 22 Aug 2001 20:08:58 -0700
From: Phil Wheeler <w7ox@earthlink.net>
To: dafouchey@home.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [105509] Re: HDD disaster (Nigel, Ade, Karl K., the EICOschematics,SCRs,
parts
bags)
Message-ID: <3B8473CA.C5522812@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Dave Fouchey wrote:

>
> I do it manually and selectively but you should be able to automate it,
> just not sure what tools to use to do so.
>
> Anybody have any ideas?

>

I think the June 21(?) issue of PC Mag (Utilities) may have something on this. I will check it out.

Phil

Date: Wed, 22 Aug 2001 21:15:14 -0600
From: "David Ek" <ekdave@earthlink.net>
To: "QRP-L" <qrp-l@lehigh.edu>
Subject: [105510] Re: Iron on schematics
Message-ID: <000501c12b81\$d7654b80\$0100a8c0@oldman>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

I've used a special film called Press-n-Peel from Techniks (www.techniks.com). Seems to work pretty well. You copy the image onto the film using a copier or laser printer, then iron the image on the board. It's not cheap, though. Electronix Express has it (www.elexp.com).

73 de Dave NK0E

Date: Wed, 22 Aug 2001 22:16:56 -0500
From: "Rob Matherly" <kc0bom@yahoo.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [105511] Re: Dangit...
Message-ID: <00d001c12b82\$11db1d80\$8611a541@intern01>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi All;

My IC problem has been resolved. Thanks to all that helped!

72/73

Rob, kc0bom

Do You Yahoo!?

Get your free @yahoo.com address at <http://mail.yahoo.com>

Date: Wed, 22 Aug 2001 21:40:50 -0600
From: "Niels" <nkristja@cadvision.com>
To: "QRP-L" <QRP-l@Lehigh.EDU>
Subject: [105512] Top of the world challange
Message-ID: <000801c12b85\$67f15b00\$299094cf@niels>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello all,

In response to the Top of the World challenge issued by the Adventure Radio Society http://www.natworld.com/ars/pages/pageone_material/events_idx.html, I'm pleased to announce that this coming weekend I intend to operate from the highest point in Saskatchewan. Details are somewhat tentative at this point but here is the current plan:

Date and time: Sunday, 26 August, 2001 1700 to 2000 UTC (operating time approximately 1 hour within this window)
Frequencies: 14.060 and perhaps QRP CW frequencies in 40m, 30m and 15m bands. 6m also possible.
Equipment: FT-817, ZM-2, and 40m inverted-vee using a DK9SQ mast
Call: VE6AAN/VE5

Saskatchewan's highest point is located in the southwestern corner of the province just south of Cypress Hills Interprovincial Park and about 1 kilometre (less than one mile) from the Alberta/Saskatchewan border. The land is privately owned and the owner, Ross Bierbach, has kindly offered to drive me there in his truck. This will not be an adventure on the scale of the incredibly arduous assault on Ontario's summit by Joe Street VE3VX0. <g> If you haven't already done so, you should read his sunbmission to the ARS Sojourner at

http://www.natworld.com/ars/pages/back_issues/2001_text/0701_text/ontario.html His feat is truly amazing.

Nevertheless, it appears that no Ham has yet been to Saskatchewan's summit. It'll be an honour to activate it and, hopefully, report back to you through

the Sojourner.

As I mentioned, I can't give firm times and frequencies. Since I will be the guest of rancher Ross Bierbach, I must conform to his schedule. I will try to meet the above posted times but that might not be possible. I expect to be on the air for only about one hour so good luck finding me. <g> My guess is that 20m will be the best band but since I have the use of a borrowed FT-817 from John VE6QSL, I hope to try other bands. If I can figure out the grid square, I might even give 6m a go.

Since my wife and I will be camping in Cypress Hills Interprovincial Park from Friday until Sunday, look for me at other times during the weekend using the call VE6AAN/VE5. However, the summit operation will only last a short time. :(

Hopefully, I'll be able to catch some of the QRP-L gang this Sunday but if not, don't despair. If I can establish a good working relationship with Ross, I'd like to make more trips to the summit - maybe even a cross-country ski trip this winter.

73,

Pat Byers VE6AAN
Ponoka, AB

Date: Wed, 22 Aug 2001 23:57:58 EDT
From: ARDUJENSKI@aol.com
To: qrp-l@lehigh.edu
Subject: [105513] Nice collection antenna articles
Message-ID: <69.19dbe285.28b5d946@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Here are a nice collection of articles on antennas (not technical) by Rich Hiller W5RH, in particular some may find the FRUGAL ANTENNA FARM of interest---Alan KB7MBI

<http://www.hal-pc.org/~bvarc/antennas.htm>

Date: Wed, 22 Aug 2001 22:08:47 -0500

From: "Mike Duke" <k5xu@concentric.net>
To: "qrp" <qrp-1@lehigh.edu>
Subject: [105514] Sangean \505 Not so Hot
Message-ID: <006801c12b8c\$488e84c0\$11de0240@k5xu>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I have this receiver and use it as a bedside monitor.

It has no filter options, and overloads quite easily. Its "sensitivity control" is a two position switch. With this attenuator turned on, it is as deaf as a post!

This unit will not function with more than fifteen or so feet of wire as the antenna. It simply caves in, receiving strong local AM broadcast signals in its if stage.

In other words, at about half the price of the Sangean 909 or 818, it's also about half the radio.

If anyone has performed any modifications which successfully improved the 505 in any way, please share them.

Mike Duke, President,
American Council of Blind Radio Amateurs

Date: Wed, 22 Aug 2001 23:26:50 -0500
From: "Rob Matherly" <kc0bom@arrl.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>, <Live-Wire@yahoogroups.com>, <hfpack@yahoogroups.com>, <amateur-repairs@yahoogroups.com>
Subject: [105515] New address for kc0bom
Message-ID: <015901c12b8b\$d63c2940\$8611a541@intern01>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello all;

I have a new e-mail address. If we were swapping e-mails over something, please change kc0bom@yahoo.com to kc0bom@arrl.net . The yahoo account's gone nuts on me so I've switched over. I'll check it again periodically, but if you send something to it, be prepared to wait a while for a response!

Thanks!

72/73

Rob, kc0bom

Date: Thu, 23 Aug 2001 00:34:27 -0400
From: "ZOOM" <kandrparker@sympatico.ca>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105516] Re: Iron on schematics
Message-ID: <00c801c12b8d\$012883a0\$3294fea9@robertpa>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I mentioned this awhile ago so here it is again! How about doing a simple mod on an old plotter and actually plotting the traces right on copper. Been doing this for a year now with excellent results everytime.

Cheers,
Robert
VE3RPF

----- Original Message -----
From: "Mike Yetsko" <myetsko@insydesw.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Wednesday, August 22, 2001 6:36 PM
Subject: Re: Iron on schematics

> I bought my 'T-Shirt' iron on patches at a computer
> show. But I think they carry them at Staples.
>
> Mike
>
> > Well, I guess that's true too. How much are the 'normal' iron-on
> schematic
> > sheets, where could I find them, and how much are they? Mouser would
> > probably have something like that, wouldn't they?
> >
> > 72/73
> > Rob, kc0bom
>
>

Date: Thu, 23 Aug 2001 00:39:06 -0400
From: "ZOOM" <kandrparker@sympatico.ca>
To: <lhlousek@nvhbell.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105517] Re: Portable SWL RX for CW??
Message-ID: <00c901c12b8d\$8b155a20\$3294fea9@robertpa>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

My Vote:

Sony 7600G

Price and performance very attractive.

Remember however these receivers are very broadband for CW so an aftermarket filter may be necessary if you intend to use it as a serious CW receiver.

That goes for ALL portables!

Sangean works well too (909)!

Sony 2010 but can be a little pricey and again filtering required for serious listening.

Cheers,
Robert
VE3RPF

----- Original Message -----

From: "lhlousek" <lhlousek@nvhbell.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Wednesday, August 22, 2001 6:53 PM
Subject: Portable SWL RX for CW??

> Does anybody know of a small portable short wave receiver that would be
> suitable for listening to CW on ham bands? Are any of the Radio
> Shack/Sangean or Sony receivers suitable? Besides having an BFO for
> CW and SSB how narrow a bandwidth do these radios have? I figure it
> would be nice to have a 1000Hz bandwidth or less to be reasonably
> useful for this purpose. I see that the new Kenwood TH-F6A HT
> advertises general coverage RX with CW and SSB modes but I guess
> nobody knows how well it works yet.

>
> Lou W7DZN

>
>

>
>

Date: Thu, 23 Aug 2001 00:41:29 EDT
From: ARDUJENSKI@aol.com
To: qrp-1@lehigh.edu
Subject: [105518] 450 ohm standoffs
Message-ID: <d1.b6ebc0e.28b5e379@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

I was checking out The Wireman (www.wireman.com) and noted he had some 450 ohm standoffs. They appear to be short sections of PVC pipe slotted on one side and a hole drilled on the other side for attaching to the structure. Pretty nifty. SEE ANTENNA ACCESSORIES--Alan KB7MBI

Date: Wed, 22 Aug 2001 21:42:03 -0700
From: "N7SG K7FD" <k7fd@hotmail.com>
To: qrp-1@Lehigh.EDU
Subject: [105519] Here I sit lonely hearted...
Message-ID: <F15769RKLpgTFur2iz20000dfb8@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

...I'm on 10.116MHz looking for action...anyone still up?

It's 0442UTC...

John, K7FD, SST/Thirty

Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>

Date: Thu, 23 Aug 2001 00:42:23 -0400
From: "ZOOM" <kandrparker@sympatico.ca>
To: <tdufresne@neb.rr.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105520] Re: Iron on schematics
Message-ID: <00e601c12b8e\$00f82f60\$3294fea9@robertpa>

MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Tom;
I'm using the HP 7475A for board plotting.
Could be you cable. Can't use a regular cable with the HP. Did we talk
about this earlier this year. Anyway give me a shout and I'll get you up
and running and anyone else who is trying to use the same plotter but are
having problems!

Cheers,
Robert
VE3RPF

----- Original Message -----
From: "TC Dufresne" <tdufresne@neb.rr.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Wednesday, August 22, 2001 6:43 PM
Subject: Re: Iron on schematics

> Rob:
> Been there done that.... Doen't work because the ink won't transfer via
> thermal methods. There is an interesting alternative that I've been toying
> with (wink) There are old pin plotters around these days, costs hundreds
of
> dollars when new, now can be had fer a song on good old E-Bay. The HP
7475A
> springs into mind. If you can figure out a way to get the machine talking
> with your computer, you can print DIRECTLY TO A PCB. The prospect is
> fascinating, to me anyway, but I haven't found a way to get the durn thing
> to talk to my computer! Someone out there knows what to do... Its a
matter
> of getting the printer cable pinout just right... Thanks for reminding me!
> Tom

> ----- Original Message -----
> From: "Rob Matherly" <kc0bom@yahoo.com>
> To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
> Sent: Wednesday, August 22, 2001 23:18 PM
> Subject: Re: Iron on schematics

>
>
> > Wow! Lots of useful info! I'm getting plenty of suggestions involving
> > laser printers and Xerox machines. Is there any way to use ink jet
> > printers?

> >
> > 72/73
> > Rob, kc0bom
> >
> >
> > -----
> > Do You Yahoo!?
> > Get your free @yahoo.com address at <http://mail.yahoo.com>
> >
>

Date: Thu, 23 Aug 2001 02:07:01 -0400
From: Pete Burbank <plburbank@kih.net>
To: qrp-l@lehigh.edu
Subject: [105521] 1 volt challenge
Message-ID: <5.0.2.1.0.20010823014815.00aa4750@KIH.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Gang,
I haven't heard much about the one volt challenge lately. I guess that it
is one of those "back of the stove"
projects. Actually I think a 1.5 volt challenge would make more sense. Or
maybe 1.35 or 1.2 for less
common batteries.
73 Pete NV4V

Date: Thu, 23 Aug 2001 06:10:10 +0000
From: "Leon Heller" <leon_heller@hotmail.com>
To: lhlousek@nvhbell.net, qrp-l@Lehigh.EDU
Subject: [105522] Re: Portable SWL RX for CW??
Message-ID: <F127w9fClNfnXafBZ7600012217@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

>Does anybody know of a small portable short wave receiver that would be
>suitable for listing to CW on ham bands? Are any of the Radio
>Shack/Sangean or Sony receivers suitable?

My old Sony 2001D isn't bad. The later ones should be better, and are a lot smaller.

Besides having an BFO for

>CW and SSB how narrow a bandwidth do these radios have? I figure it
>would be nice to have a 1000Hz bandwidth or less to be reasonably
>useful for this purpose.

They all use the same bandwidth for AM, SSB and CW, although some people have transplanted narrower filters into the 2001D, for SSB.

They are OK for occasional use, and you could always use a narrow audio filter on the output. I've played about with a DSP filter on mine using the Analog Devices EZ-Kit Lite.

73, Leon

--

Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon_heller@hotmail.com

My web page: http://www.geocities.com/leon_heller

My low-cost Altera Flex design kit: <http://www.leonheller.com>

Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>

Date: Thu, 23 Aug 2001 06:14:13 +0000
From: "Leon Heller" <leon_heller@hotmail.com>
To: kc0bom@yahoo.com, qrp-1@Lehigh.EDU
Subject: [105523] Re: Dangit...
Message-ID: <F111iRAECJig1Pr0Fr20001204d@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

>From: "Rob Matherly" <kc0bom@yahoo.com>
>Reply-To: kc0bom@yahoo.com
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
>Subject: Dangit...
>Date: Wed, 22 Aug 2001 18:22:26 -0500
>
>Well, I hit a brick wall again. Anyone know where I can find an NE-612AN

>equivalent? I've checked Dan's Small Parts, Mouser, and Digi-Key.
>According to the QRP-F archives, the NE-612AN isn't in production anymore.
>
>You'd think it'd be easy to find a part from a 3 year old schematic....

It's been the SA612 for a few years, made by Philips.

73, Leon

--

Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon_heller@hotmail.com

My web page: http://www.geocities.com/leon_heller

My low-cost Altera Flex design kit: <http://www.leonheller.com>

Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>

Date: Thu, 23 Aug 2001 02:16:39 -0400
From: "Don Snider" <dsnider@speakeasy.org>
To: <qrp-l@lehigh.edu>
Subject: [105524] FW: PSK-31 expedition to the BWCA: Updates
Message-ID: <000101c12b9b\$2bfc8820\$27905c42@RHRS.RHRS.COM>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Hi all, I'm leaving in a few hours for the Boundary Waters. Everything is packed up and ready to go. Hope to see you on the air! I may get on the air for a bit on Friday if camp setup goes well.

August 24 - September 1st or 2nd I'll be on 14.071+
Maybe 80 meters on occasion

73,
Don

-----Original Message-----

From: Don Snider [mailto:dsnider@speakeasy.org]

Sent: Monday, August 20, 2001 12:15 AM

To: 'qrp-l@lehigh.edu'

Subject: FW: PSK-31 expedition to the BWCA: Updates

Hi all,

I've entered some updates on the Boundary Waters canoe expedition website. Please take a look when you get a chance.
<http://n3mk.com/bwca-psk31-2001.htm>

I'm still trying to determine the best frequency to use. I'm trying to stay a bit away from some of the stronger stations. I'm thinking a bit above 14.071 would be best. Comments?

The BWCA canoe expedition:

Every year I go to the Boundary Waters of northern Minnesota to canoe and fish. When I can, I take a small cw rig for making contacts while in camp. This year will be much different. I'm attempting to take a complete PSK-31 rig including a computer into the Boundary Waters. Successfully operating a PSK-31 station from the BWCA will be a challenge but I think it will be lots of fun. I'll be operating August 24th to September 1st from 00:00 - 04:00 UTC. I'll be just above 14.071 and possibly on 80 meters with the Warbler. The station will be up on a PSK-20, Fujitsu pen computer in its hazardous environment case, and a 20 meter delta loop. The PSK-20 will run on 10 AA NiMH batteries. Both the pen computer and AA batteries will be charged by a Unisolar 11 watt flexible solar panel.

73,
Don Snider
N3MK

Date: Thu, 23 Aug 2001 02:03:24 -0500
From: Tim Pettibone <k5oi@cowboy.net>
To: qrp-l@lehigh.edu
Subject: [105525] OT: I'm back!
Message-ID: <5.1.0.14.0.20010823015555.009e5800@cowboy.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Gang:

Have arrived in Oklahoma (as in Stillwater). Very nice town with extraordinarily friendly and nice people! I'm still using K5OI@ARRL.NET but the @COWBOY.NET adds a nice touch. Looking at some DSL options so this ISP might not hold for long. Equipment still needs to be unpacked and it looks like the C&Rs may mean some serious attic antennas. The peak of the attic is at about 22 feet so I should be able to do as well as I did in Las Cruces (around 18') Don't laugh as I was able to work lots of foxes (and

fox hunters) with that silly antenna, and have around 160 DXCC at QRP levels as well.

Thanks for the well wishes and I'll seriously miss New Mexico - but I'm an OKIE now. Look for me on the bands.

72/73

Tim K50I (at least I didn't have to change the call!)

Date: Thu, 23 Aug 2001 08:25:27 -0400 (EDT)
From: "John L. Sielke" <w2agn@pobox.com>
To: Tim Pettibone <k5oi@cowboy.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [105526] RE: OT: I'm back!
Message-ID: <XFMail.20010823082527.w2agn@pobox.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
MIME-Version: 1.0

Sounds like

K 5 Okie Immigrant

Always liked Oklahoma, except for the weather. Most honest people in the country.

John W2AGN

On 23-Aug-2001 Tim Pettibone wrote:

> Thanks for the well wishes and I'll seriously miss New Mexico - but I'm an
> OKIE now. Look for me on the bands.
>

Date: Thu, 23 Aug 2001 09:05:04 -0400
From: "Upton, Shawn" <SUpton@ALLEGROMICRO.com>
To: "'qrp-l@lehigh.edu'" <qrp-l@lehigh.edu>
Subject: [105527] Re: Conversions (TenTec 13xx series)
Message-ID: <E1F0152638DBD311AEF700D0B74455E23BFCA3@exchange_nh.allegromicro.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Date: Tue, 21 Aug 2001 08:24:20 -0500

From: "Ron Pierce"
To:
Subject: [105343] Conversions ?

Has anyone made up a list of components necessary to convert a Ten-Tec 1300 series QRP rig from say 40 meters to 20 meters ? My 1340 is setting on the shelf collecting dust, and thought I might use it on 20 meters.

I am new to QRP but not to Ham Radio or Electronics. Any comments would be appreciated.

Ron
NI0L

I'm not positive but I think the crystals used though out are different. Check their websight and see if the IF freq changes band to band. I think it does, meaning that you'd need at least 6 new crystals, along with a slew of caps. The board is the same, I think, along with most of the IC's, torroids and whatnot--although the torroids would have to be rewound too.

The vfo is probably the same 4MHz jobbie.

It could be done, and it might not be that hard, but I suspect it'd be easier to sell the kit and buy a new one. Or trade or...

Shawn Upton, KB1CKT
Product Development Engineer - Sensors
Allegro MicroSystems, Inc
Concord, NH
603.228.5533 ext. 429

Date: Thu, 23 Aug 2001 09:29:17 -0400
From: "Upton, Shawn" <SUpton@ALLEGROMICRO.com>
To: "'qrp-l@lehigh.edu'" <qrp-l@lehigh.edu>
Subject: [105528] SST question
Message-ID: <E1F0152638DBD311AEF700D0B74455E23BFCA4@exchange_nh.allegromicro.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

C28, is that known to be "touchy"? I sat down and did the alignment last night. First, I got the reciever working good--I was able to inject in a -120dBm signal and hear it (really faintly, but there). But, using a spectrum analyzer, I was getting about -30dBm output, with spurs. Time to go over to the scope.

Looking at the output of U4, I was getting a mess on key down--nasty looking signal--must be oscillating (in a bad way, not the good way!). I redid all the solder joints on the tank circuit there, still had a mess. I finally put a screwdriver to C28 and finally got a good signal at one point--but I had to make a plastic screwdriver to do the final adjustment. I finally got a good signal, and finally adusted the pot for about a watt output (I didn't feel like pushing any more out, for future battery use).

So, it works--but my question is--is this normal? I'd expect the output of U4 to rise and fall in regards to the tank adjustment, not go into and out of oscillation.

Also, am I looking at the output circuit (of U4) correctly? Is this a tank circuit, or filter? I know that a tank circuit works as a filter, but... Given the light coupling--5pF--I thought it was a tank circuit, not a filter with controlled input/output impedances.

Shawn Upton, KB1CKT
Product Development Engineer - Sensors
Allegro MicroSystems, Inc
Concord, NH
603.228.5533 ext. 429

Date: Thu, 23 Aug 2001 09:21:12 -0400 (EDT)
From: Frank Brickle <brickle@pobox.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [105529] Tnx: (rare) grid square?
Message-ID: <Pine.BSI.4.05L.10108230919170.17069-100000@pluto.njcc.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Thanks to all. Very good advice, short term and long term both.

73
Frank
AB2KT

Date: Thu, 23 Aug 2001 08:26:27 -0500
From: kcieslak <kcieslak@execpc.com>

To: qrp-1@lehigh.edu
Subject: [105530] Fwd: Request to mailing list TenTec rejected
Message-ID: <3B850483.5AB6A5B6@execpc.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

If you just want to view the list and not subscribe I get to it via
www.contesting.com and click on the ten tec link. If you want to post
messages you must be a subscriber.

Brian K9WIS

Date: Thu, 23 Aug 2001 06:34:11 -0700
From: Phil Wheeler <w7ox@earthlink.net>
To: SUpton@ALLEGROMICRO.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [105531] Re: SST question
Message-ID: <3B850653.F7780B1E@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Not a direct answer to your question, Shawn, but there is an extensive
SST Info file put together by AL7FS at

<http://www.g3ycc.karoo.net/sst1.html>

ant other sites. I've always viewed the SST as on of the more
"experimental" kits, and the file referenced above supports that belief.

73, Phil W7OX

"Upton, Shawn" wrote:

>
> C28, is that known to be "touchy"? I sat down and did the alignment last
> night. First, I got the reciever working good--I was able to inject in a
> -120dBm signal and hear it (really faintly, but there). But, using a
> spectrum analyzer, I was getting about -30dBm output, with spurs. Time to
> go over to the scope.
>
> Looking at the output of U4, I was getting a mess on key down--nasty looking
> signal--must be oscillating (in a bad way, not the good way!). I redid all
> the solder joints on the tank circuit there, still had a mess. I finally
> put a screwdriver to C28 and finally got a good signal at one point--but I
> had to make a plastic screwdriver to do the final adjustment. I finally got

> a good signal, and finally adusted the pot for about a watt output (I didn't
> feel like pushing any more out, for future battery use).
>
> So, it works--but my question is--is this normal? I'd expect the output of
> U4 to rise and fall in regards to the tank adjustment, not go into and out
> of oscillation.
>
> Also, am I looking at the output circuit (of U4) correctly? Is this a tank
> circuit, or filter? I know that a tank circuit works as a filter, but...
> Given the light coupling--5pF--I thought it was a tank circuit, not a filter
> with controlled input/output impedances.
>
> Shawn Upton, KB1CKT
> Product Development Engineer - Sensors
> Allegro MicroSystems, Inc
> Concord, NH
> 603.228.5533 ext. 429

Date: Thu, 23 Aug 2001 10:05:32 -0400
From: "Upton, Shawn" <SUpton@ALLEGROMICRO.com>
To: "'Phil Wheeler'" <w7ox@earthlink.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [105532] RE: SST question
Message-ID: <E1F0152638DBD311AEF700D0B74455E23BFCA9@exchange_nh.allegromicro.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Ah, that's a better copy of those SST files! I looked at one the other day
but I had to modify it, as the double spacing was driving me nuts! I've
been reading through that file, and it probably does have something to say
about my issue, but I haven't hit it yet. Guess I'll go back and do some
more reading.

Shawn Upton, KB1CKT
Product Development Engineer - Sensors
Allegro MicroSystems, Inc
Concord, NH
603.228.5533 ext. 429

-----Original Message-----
From: Phil Wheeler [mailto:w7ox@earthlink.net]
Sent: Thursday, August 23, 2001 9:34 AM
To: SUpton@ALLEGROMICRO.com

Cc: Low Power Amateur Radio Discussion
Subject: Re: SST question

Not a direct answer to your question, Shawn, but there is an extensive SST Info file put together by AL7FS at

<http://www.g3ycc.karoo.net/sst1.html>

ant other sites. I've always viewed the SST as on of the more "experimental" kits, and the file referenced above supports that belief.

73, Phil W70X

Date: Thu, 23 Aug 2001 10:00:25 EDT
From: RLemmel@aol.com
To: qrp-l@lehigh.edu
Subject: [105533] Re: Resonant vs. Nonresonant Antenna
Message-ID: <12e.376dbeb.28b66679@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

In a message dated 8/22/2001 8:04:27 PM Eastern Daylight Time, k5di@zianet.com writes:

<< A 100 foot wire fed at the center with 450 ohm feedline will in general be mis-matched at the antenna and at the radio so you must have an antenna tuner to match the impedance at the tuner input to 50 ohms resistive at the output. If you do nothing at the antenna then the feedline will have a very high swr and it will radiate, >>

M. Walter Maxwell in his book 'Reflections II' writes:

"High SWR in an open-wire line at HF caused by a severe load mismatch does not produce antenna currents on the line, nor cause the line to radiate if the feed currents in each wire are balanced, and if the spacing is small at the wavelength of operation."

"Both coax and open-wire feed lines may radiate, though not at a significant level, by reradiating energy coupled into the line from the antenna because of asymmetrical positioning with respect to the antenna. The energy coupled from the antenna results in antenna currents flowing on the outside of the outer coax conductor, or in phase (common mode) currents flowing on the wires of the open-wire line. But this condition has no relation to the level of the SWR on the line in either case."

Maxwell cites as his references 'The ARRL Antenna Book' 10th edition and J.J. Schultz (W4FA), "Broad-Band Balun", CQ, Aug 1968.

Could you be so kind as to provide suitable references in support of your statement.

TIA es 72, Randy WV9N

Date: Thu, 23 Aug 2001 09:45:56 -0500
From: "J. W. (Dub) Thornton" <dub@oklahoma.net>
To: qrp-l@lehigh.edu
Subject: [105534] Need manual for HP 1745-A scope:
Message-ID: <5.1.0.14.2.20010823094343.01e830a0@mail.oklahoma.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Any help appreciated.

"72"

-

J. W. (Dub) Thornton WA5YFY
Minco, OK.

Date: Thu, 23 Aug 2001 10:46:38 EDT
From: MertNellis@aol.com
To: qrp-l@lehigh.edu
Subject: [105535] Re: grid-leak bias
Message-ID: <130.78ee0c.28b6714e@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

BRAVO, Mike,
You got to the core of that thread! It also restored my faith in what knowledge I think I have. I was vey glad to hear you set the story correct. Take care. Long live grid -leak bias.....better than the media bias.
Mert Nellis W0UFO MNQRP

You said:

Actually grid leak bias is used in QRP stuff too. For example the regenerative receiver (as well as most oscillators) used grid leak bias. This is very simply caused when the small positive voltage swings are

rectified by the grid-cathode section of the tube which acts like a diode. The currents produced by this rectified voltage produce the bias voltage across the grid leak resistor.

Date: Thu, 23 Aug 2001 11:33:17 -0400
From: Pete Burbank <plburbank@kih.net>
To: dub@oklahoma.net, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [105536] Re: Need manual for HP 1745-A scope:
Message-ID: <5.0.2.1.0.20010823113121.00aa4bb0@KIH.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 09:45 AM 8/23/2001 -0500, J. W. (Dub) Thornton wrote:

>Any help appreciated.

>

>"72"

>-

>J. W. (Dub) Thornton WA5YFY

>Minco, OK.

W7FG in Bartlesville,OK has lots of manuals and good to deal with.
73 Pete NV4V

Date: Thu, 23 Aug 2001 12:36:57 -0700
From: "John Dorson" <JDORSON@worldshare.net>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [105537] Battery Charging
Message-ID: <000901c12c0a\$fa41dcc0\$526e5a41@john>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I need some advice on charging small gelcell batteries

.

have some 12v/4ah batteries one of which has been
Charged using a regular automotive type charger, which
Seems to work but I feel that I may be damaging it.
Any help would be appreciated.

Thanks

John K2JHU
jdorson@worldshare.net

Date: Thu, 23 Aug 2001 09:41:53 -0700
From: Phil Wheeler <w7ox@earthlink.net>
To: daFouchey@home.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [105538] Re: HDD disaster (Nigel, Ade, Karl K., the EICO schematics,SCRs,
parts
bags)
Message-ID: <3B853251.4896E3F1@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Dave Fouchey wrote:

>
> Ed this is the exact reason I put in a CD-RW drive in my PC. So I could
> back up critical stuff fairly cheaply. Especially the Tax doc's..something
> to consider.
>

Dave,

I looked into software to automate backups to CD-R/CD-RW. I ended up
buying Backup Now! Desktop Edition 2.2. It is one of two Editor's
Choices in PC Mag (6/26/01) and they say it is the "best choice for
backing up to CD-Rs and CD-RWs -- the only archival media it supports".

<http://www.ntibackupnow.com>

They have a list of supported drives at the web site and my Plextor was
on it. My guess is that new ones might not be (but might still work).

Installation (you receive it by download) was a bit wierd, but went OK
in the end. And I have done a trial directory backup and it worked
fine.

You can read the review here:

<http://www.pcmag.com/article/0,2997,s%253D1474%2526a%253D1987,00.asp>

Phil

Date: Thu, 23 Aug 2001 12:44:30 -0400
From: Bill Coleman <aa4lr@arrl.net>
To: <mjfitz@uswest.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105539] Re: Using Double-Run Coax as Balanced Feeders?
Message-ID: <20010823164531.0KB10437.imf13bis.bellsouth.net@[192.168.0.20]>
Mime-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

On 8/18/01 7:31 PM, mjfitz@uswest.net at mjfitz@uswest.net wrote:

> I need a reference/explanation (since he doesn't
>believe me nor my shade-tree "reasoning") that describes the
>loss when using two parallel runs of coax as a balanced run,
>like you might use to bring it thru a wall from a balun to a
>tuner... He is telling everyone he meets that using coax
>like this is low loss just like the open wire line, and I do
>believe I have learned differently right here...

No, he's wrong. All that dielectric over the wire contributes to loss, as does the presence of the grounded sheilds a fraction of an inch away.

> Now, if the run of coax feeder is relatively short then
>the losses will be inconsequential in most cases, but by
>doing this you loose the low-loss advantage that open-wire
>feeders provide for that length where the coax replaces the
>open wire line, right?

Right. But it might be OK to do this for 6 or 8 inches in order to get through a wall.

Bill Coleman, AA4LR, PP-ASEL Mail: aa4lr@arrl.net
Quote: "Not within a thousand years will man ever fly!"
 -- Wilbur Wright, 1901

Date: Thu, 23 Aug 2001 18:48:01 +0200
From: Johannes Hiller <HANNES@ulmnetz.de>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [105540] Palm Radio Mini-Paddle update

Message-ID: <3B8533C1.8BA4445@ulmnetz.de>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hello folks,

this is to inform you that we have just released our brandnew homepage.
At <http://www.palm-radio.de>
you can see a lot of new information on the Mini-Paddle. There are
pictures of our new MP-817 (all black with magnetic mount) and even more
user feedbacks. We also added a special page with your ideas on mounting
the Mini-Paddle to different rigs. New entries and any comments are of
course still welcome!
Please send them to Klaus Schmittke (email: pet2002@gmx.net), who did a
superb job in the new design of our homepage. Klaus maintains the page
for Palm Radio and will be collecting and answering all incoming
comments and questions on the page and the Mini-Paddle since I will be
off for a two week holiday to Italy tomorrow morning.

Thanks to all of you for making the Mini-Paddle a great success!

Best 73 from Ulm, Germany

Hannes, DL9SC0

Palm Radio Germany
<http://www.palm-radio.de>

Date: Thu, 23 Aug 2001 10:58:17 -0600 (CST)
From: Bruce Ratray <ratray@gpfn.sk.ca>
To: Elecraft <elecraft@qth.net>, QRP-Canada <qrp-canada@neale.gpfn.sk.ca>, Low
Power Group <qrp-1@LeHigh.EDU>
Subject: [105541] toroid wire question
Message-ID: <Pine.LNX.4.33.0108231049150.4957-100000@neale.gpfn.sk.ca>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Many thanks to ALL the replies I received concerning my question about
getting the enamel off the toroid wire prior to soldering...overall, it
seems like basically I wasn't using a hot enough iron...my iron does have
a chisel tip and that's ok but I apparently need something up around
700-850 degrees range...also I was just placing the wire in the blob when
I should have been placing the tip of the wire in first, allowing the

copper to conduct and working from there "up" the wire to the toroid...several commented that the green wire is "tougher" than the red wire...so a trip to our one surviving-so-far electronics supply store will be in order...another idea was to try a butane lighter followed by emery cloth...I will try that as well if I can find my butane lighter and get it going... ;-)) ...thanks again gang!

..72/73 - Bruce (VE5RC+VE5QRP) QRP-C#1 QRP-L#886 ARCI#9683 Zombie#272
K2#2032 A-1 Operator Club - 10/10# 944 - SOC #11 & #12 - Whiner#10 -
QRP Borg#1
"QRP! How sweet it is!" oo#148 "I am da man wit "DAH" paddle!"

Date: Thu, 23 Aug 2001 17:17:24 +0000
From: "Leon Heller" <leon_heller@hotmail.com>
To: JDORSON@worldshare.net, qrp-l@Lehigh.EDU
Subject: [105542] Re: Battery Charging
Message-ID: <F151jYKtWfN3vSAMfKQ0001291f@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

>
>I need some advice on charging small gelcell batteries
>.
> have some 12v/4ah batteries one of which has been
>Charged using a regular automotive type charger, which
>Seems to work but I feel that I may be damaging it.
>Any help would be appreciated.

You will damage the battery. Ordinary car battery chargers don't limit the current to a safe value.

Leon

--

Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon_heller@hotmail.com
My web page: http://www.geocities.com/leon_heller
My low-cost Altera Flex design kit: <http://www.leonheller.com>

Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>

Date: Thu, 23 Aug 2001 10:19:37 -0700 (PDT)
From: N1EU <n1eu@yahoo.com>
To: qrp-1@Lehigh.EDU
Subject: [105543] Re: Battery Charging
Message-ID: <20010823171937.67755.qmail@web14603.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

"I need some advice on charging small gelcell
batteries

..
I have some 12v/4ah batteries one of which has been
Charged using a regular automotive type charger, which
Seems to work but I feel that I may be damaging it.
Any help would be appreciated."

You might check the info at the following Web sites:

<http://www.albany.net/~bg/QRP/sla.htm>
<http://www.qsl.net/wb3gck/gel-cell.htm>

GL/73,
Barry N1EU

Do You Yahoo!?
Make international calls for as low as \$.04/minute with Yahoo! Messenger
<http://phonecard.yahoo.com/>

Date: Thu, 23 Aug 2001 10:31:22 -0700
From: "Bob Tellefsen" <n6wg@earthlink.net>
To: <qrp-1@Lehigh.EDU>
Subject: [105544] FOX--N6WG and NW7DX tonight
Message-ID: <MABBJOEABOILMKCJCLFCCEECKAA.n6wg@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Last minute reminder, folks.
N6WG around 14061, NW7DX around 14055.
Fun starts at 0200 UTC Friday (Thursday evening local time 7-9 Pacific, 8-10
Mountain, 9-11 Central, and 10-12 Eastern)
Exchange is RST STATE NAME POWER.

We really want your business. Come and get us.
73 and see you in the Hunt.
Bob N6WG
The Golden Fox

Date: Thu, 23 Aug 2001 10:26:32 -0700
From: <schoon@amgt.com>
To: <qrp-1@Lehigh.EDU>, <aa4lr@arrl.net>
Subject: [105545] RE: Slingshots - a Slingshotologist's tip
Message-ID: <c=US%a=_%p=American_Geotech%l=AG-CALCITE-BD-010823172632Z-3227@ag-basalt-pxy.amgt.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

I tried the open face reels as well, but they would snag or get snarled easily - so I switched to closed face. The glasses and hardhat are always worn!! Heavy gloves as well.

72

.mark

>-----
>From: Bill Coleman[SMTP:aa4lr@arrl.net]
>Sent: Wednesday, August 22, 2001 6:59 PM
>To: Low Power Amateur Radio Discussion
>Subject: RE: Slingshots - a Slingshotologist's tip
>
>On 8/20/01 1:42 PM, schoon@amgt.com at schoon@amgt.com wrote:
>
>>I disagree on the spool in front - as I've been a victim of the line
>>snagging and the weight returning back to me at high velocity... Also,
>>aiming can be difficult with the drag on the line coming from a
>>different direction than where the shooter is firing... The safest way
>>is to use a closed face fishing reel - ala Zebco 404 type mounted right
>>in line with the release point of the sling..... Makes for better
>>aiming...
>
>I used to use a closed-face fishing reel, but found that an open-face
>reel offers less resistance.
>
>I *ALWAYS* wear full eye-protection (eg goggles ON TOP of my glasses)
>when using the slingshot. Sometimes, I'll wear a hard-hat as well.
>

>
>
>Bill Coleman, AA4LR, PP-ASEL Mail: aa4lr@arrl.net
>Quote: "Not within a thousand years will man ever fly!"
> -- Wilbur Wright, 1901
>
>
>
>
>

Date: Thu, 23 Aug 2001 10:31:17 -0700
From: <schoon@amgt.com>
To: <qrp-1@Lehigh.EDU>, <kandrparker@sympatico.ca>
Subject: [105546] RE: Iron on schematics
Message-ID: <c=US%a=_%p=American_Geotech%l=AG-CALCITE-BD-010823173117Z-3228@ag-basalt-pxy.amgt.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Why couldn't this be done with an ink-jet?? I'd like to see your mod to your plotter - as I have access to one.

.mark

>-----
>From: ZOOM[SMTP:kandrparker@sympatico.ca]
>Sent: Wednesday, August 22, 2001 9:34 PM
>To: Low Power Amateur Radio Discussion
>Subject: Re: Iron on schematics
>
>I mentioned this awhile ago so here it is again! How about doing a simple
>mod on an old plotter and actually plotting the traces right on copper.
>Been doing this for a year now with excellent results everytime.
>
>Cheers,
>Robert
>VE3RPF
>
>----- Original Message -----
>From: "Mike Yetsko" <myetsko@insydesw.com>
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
>Sent: Wednesday, August 22, 2001 6:36 PM
>Subject: Re: Iron on schematics
>

>
>> I bought my 'T-Shirt' iron on patches at a computer
>> show. But I think they carry them at Staples.
>>
>> Mike
>>
>> > Well, I guess that's true too. How much are the 'normal' iron-on
>> schematic
>> > sheets, where could I find them, and how much are they? Mouser would
>> > probably have something like that, wouldn't they?
>> >
>> > 72/73
>> > Rob, kc0bom
>>
>>
>
>
>

Date: Thu, 23 Aug 2001 13:35:01 -0400
From: "Jason Hissong" <jhissong1@columbus.rr.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105547] Re: Battery Charging
Message-ID: <005f01c12bf9\$f0315320\$43e29ad1@inhouse.wcom.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

These are the kinds of emails that makes this list so worthwhile. Ever since joining this list, I have seen some great emails on technical subjects and links to areas on the web that can help us out. I have increased my enjoyment my amatuer radio with QRP operating and this list has increased my enjoyment of QRP operating (the Fox hunts are so much fun)... Everyone here as been very friendly with my dumb questions without making me feel too dumb :-)

Thanks to all on the list and especially the contributors... I very much appreciate your valuable assistance! Now if I can only get the XYL to approve the purchase of a K2! HI!

I am looking forward to the day that I can have CW QSO's with folks without a pen and paper!

72/73 de N8XE

Jason Hissong

BTW.. have worked at least one DX station a night this week with 5 watts using my Alpha Delta DXLB+ inverted V up about 40 feet. It is so much fun NOT telling the DX station that I am QRP... and then afterwards sign N8XE/QRP when closing the QSO... "uh wait OM... ur RST is nw 359 359"

----- Original Message -----

From: N1EU <n1eu@yahoo.com>

To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

Sent: Thursday, August 23, 2001 1:19 PM

Subject: Re: Battery Charging

> "I need some advice on charging small gelcell
> batteries
> ..
> have some 12v/4ah batteries one of which has been
> Charged using a regular automotive type charger, which
> Seems to work but I feel that I may be damaging it.
> Any help would be appreciated."
>
> You might check the info at the following Web sites:
>
> <http://www.albany.net/~bg/QRP/sla.htm>
> <http://www.qsl.net/wb3gck/gel-cell.htm>
>
> GL/73,
> Barry N1EU
>
>
> -----
> Do You Yahoo!?
> Make international calls for as low as \$.04/minute with Yahoo! Messenger
> <http://phonecard.yahoo.com/>

Date: Thu, 23 Aug 2001 13:42:17 -0400

From: "David Porter" <aa3ur@home.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [105548] Re: Slingshots

Message-ID: <007401c12bfa\$f4a113e0\$927ba8c0@jamison1.pa.home.com>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Rather than a reel, there is a nice thing available for archers called (I think) Deer Tracker. it is a tube of very light, but very strong line that is payed from the hollow core of the coil of line. There is almost no added friction or drag. I used it at FD this year and just let it sit on the ground. No problem.

I was just the fool using the slingshot, not the owner. I believe that George Heron, N2APB, is the party it belongs to.

David Porter
aa3ur@home.com
AA3UR

Date: Thu, 23 Aug 2001 13:46:35 -0400
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <schoon@amgt.com>, "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [105549] Re: Iron on schematics
Message-ID: <005201c12bfb\$910cb7c0\$6b01a8c0@INSYDENT>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

----- Original Message -----
From: <schoon@amgt.com>

> Why couldn't this be done with an ink-jet?? I'd like to see your mod
> to
> your plotter - as I have access to one.
>
> .mark

Ever try to make a hard piece of PCB material feed through an ink jet printer? Heck, it's tough enough making posterboard feed!

Seriously, for the plotter, all you really have to do is rig up a magnet system to hold the piece of PCB material in a fixed position on the plotting board. Then rig up a way for a pen like a 'Sharpie' to be held firmly in the pen holder. You can even get some 'narrow barrel' Sharpies now that you might be able to rig up to be held in the pen holder.

One warning... If your plotter does any movement where the pen goes

UNDER a rail, then you'll have problems putting in something like a Sharpie pen.

Another option is to open the pen and fill it with a more acceptable ink or resist. I have an old RS plotter that uses the Houston pens, and the backs of the pens pop off. I tried regular ink in them but it just drips and makes a mess. I ended up finding out that 'stamp pad' ink was perfect! It's fairly viscous, but still flows just fine to the tip. The pen tip can be held down and it doesn't puddle. I bought the ink in bottles that have a 'roller ball' (like deodorant) to ink stamp pads. I popped the top, then used a medicine dropper to refill my plotter pens.

Don't know how that would work as a resist though, never tried it.

Mike

```
> >From: ZOOM[SMTP:kandrparker@sympatico.ca]
> >Sent: Wednesday, August 22, 2001 9:34 PM
> >To: Low Power Amateur Radio Discussion
> >Subject: Re: Iron on schematics
> >
> >I mentioned this awhile ago so here it is again! How about doing a
> >simple
> >mod on an old plotter and actually plotting the traces right on
> >copper.
> >Been doing this for a year now with excellent results everytime.
> >
> >Cheers,
> >Robert
> >VE3RPF
```

Date: Thu, 23 Aug 2001 13:50:33 -0400
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <aa3ur@home.com>, "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [105550] Re: Slingshots
Message-ID: <006201c12bfc\$1fca7740\$6b01a8c0@INSYDENT>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

This is a good idea!!

I think most of the problems with ANY kind of feed device for lines is the fact that people try to just grab and go. How many times have you grabbed the rod and reel from the garage and the first few cast it twitches and catches as it feeds?

But I still think that if you are going to BUY something and make it up, then buy the right thing. And the reels made for bow and arrow fishing are the best choice.

Your deer tracker would be excellent, but it's probably a 'one shot' kind of thing, and I'll bet that won't appeal to many people.

Mike

----- Original Message -----

From: David Porter <aa3ur@home.com>

> Rather than a reel, there is a nice thing available for archers called
(I
> think) Deer Tracker. it is a tube of very light, but very strong line
that
> is payed from the hollow core of the coil of line. There is almost no
added
> friction or drag. I used it at FD this year and just let it sit on
the
> ground. No problem.
>
> I was just the fool using the slingshot, not the owner. I believe
that
> George Heron, N2APB, is the party it belongs to.
>
> David Porter
> aa3ur@home.com
> AA3UR

Date: Thu, 23 Aug 2001 13:57:54 -0400

From: Bill Coleman <aa4lr@arrl.net>

To: <mark@buttery.org>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [105551] Re: Where to find a 40673?
Message-ID: <20010823175852.DTQ18631.imf14bis.bellsouth.net@[192.168.0.20]>
Mime-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

On 8/9/01 12:03 PM, Mark J. Dulcey at mark@buttery.org wrote:

>At this point, all dual-gate MOSFETs are NOS; nobody is
>making them any more. (I'm not sure anyone is even making depletion-mode
>single-gate MOSFETs at this point.)

Why not? Why have people stopped making these devices? What has replaced them?

Bill Coleman, AA4LR, PP-ASEL Mail: aa4lr@arrl.net
Quote: "Not within a thousand years will man ever fly!"
 -- Wilbur Wright, 1901

Date: Thu, 23 Aug 2001 14:10:18 -0400
From: "ZOOM" <kandrparker@sympatico.ca>
To: <myetsko@insydesw.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105552] Re: Iron on schematics
Message-ID: <008301c12bfe\$def88100\$3294fea9@robertpa>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Here is the way I do it for best results!

PCB board is taped onto an 8x11 sheet of paper but just on the extreme corners.

Sharpie pens WILL NOT WORK!!! Been there and the pen will not release it's ink efficiently.

The only pen that I found works well is: STAEDTLER LUMOCOLOR Permanent Ink pen # 318

Yes you need to cut the pen down to the size on the original plotter pen size or you will have too large of a torque moment and the pen will be everywhere. Lastly;

cut open an old plotter pen and slide the permanent ink pen into the barrel so the plotter will be able to hold it.

DO NOT use an old plotter pen. It will not work even if you fill it with ink. They are not make to write on a copper surface. Again I have tried this and no joy.

For thoes who wish to discuss this further, pleas e-mail me off list.

Cheers,
Robert
VE3RPF

----- Original Message -----

From: "Mike Yetsko" <myetsko@insydesw.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Sent: Thursday, August 23, 2001 1:46 PM

Subject: Re: Iron on schematics

> ----- Original Message -----

> From: <schoon@amgt.com>

>

>

> > Why couldn't this be done with an ink-jet?? I'd like to see your mod
> to

> > your plotter - as I have access to one.

> >

> > .mark

>

> Ever try to make a hard piece of PCB material feed through an ink jet
> printer? Heck, it's tough enough making posterboard feed!

>

> Seriously, for the plotter, all you really have to do is rig up a magnet
> system to hold the piece of PCB material in a fixed position on the
> plotting board. Then rig up a way for a pen like a 'Sharpie' to be held
> firmly in the pen holder. You can even get some 'narrow barrel'

> Sharpies

> now that you might be able to rig up to be held in the pen holder.

>

> One warning... If your plotter does any movement where the pen goes
> UNDER a rail, then you'll have problems putting in something like a
> Sharpie pen.

>

> Another option is to open the pen and fill it with a more acceptable ink
> or resist. I have an old RS plotter that uses the Houston pens, and the
> backs of the pens pop off. I tried regular ink in them but it just
> drips and

> makes a mess. I ended up finding out that 'stamp pad' ink was perfect!

> It's fairly viscous, but still flows just fine to the tip. The pen tip

> can be held
> down and it doesn't puddle. I bought the ink in bottles that have a
> 'roller
> ball' (like deodorant) to ink stamp pads. I popped the top, then used a
> medicine dropper to refill my plotter pens.
>
> Don't know how that would work as a resist though, never tried it.
>
> Mike
>
> > >From: ZOOM[SMTP:kandrparker@sympatico.ca]
> > >Sent: Wednesday, August 22, 2001 9:34 PM
> > >To: Low Power Amateur Radio Discussion
> > >Subject: Re: Iron on schematics
> > >
> > >I mentioned this awhile ago so here it is again! How about doing a
> simple
> > >mod on an old plotter and actually plotting the traces right on
> copper.
> > >Been doing this for a year now with excellent results everytime.
> > >
> > >Cheers,
> > >Robert
> > >VE3RPF
>
>
>
>

Date: Thu, 23 Aug 2001 14:21:23 -0400
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <kandrparker@sympatico.ca>, "Low Power Amateur Radio Discussion" <qrp-
l@lehigh.edu>
Subject: [105553] Re: Iron on schematics
Message-ID: <00bb01c12c00\$6fc09a00\$6b01a8c0@INSYDENT>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I'm surprised that the Sharpie doesn't work too well in the plotter,
especially since back in the 70's you used to find Sharpie pens
included with the kits to etch your own boards. But I suppose
there's a lot more to it than just drawing like you'd hold the pen in
your hands.

Mike

Date: Thu, 23 Aug 2001 13:09:10 -0500
From: "Kanalz, Karl" <Karl.Kanalz@allegiancetelecom.com>
To: "'kandrparker@sympatico.ca'" <kandrparker@sympatico.ca>, Low Power Amateur
Radio Discussion <qrp-l@lehigh.edu>
Subject: [105554] Pens In H-P Plotters (was: Iron on schematics)
Message-ID:
<E78D8A9D6762D411B5440008C791D4AA04A49E28@dfwex03.allegiancetelecom.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Sanford "Sharpie" pens may not work in a
"plotter-direct-to-copper-board" application, but
they DO work as a resist-ink pen on copper PC
boards quite well (I've used them many, many times,
both the "micro tip" and "fine tip" versions).

Karl K - W8TIF
McKinney, Texas

-----Original Message-----
From: ZOOM [SMTP:kandrparker@sympatico.ca]
Sent: Thursday, August 23, 2001 1:10 PM
To: Low Power Amateur Radio Discussion
Subject: Re: Iron on schematics

Here is the way I do it for best results!
PCB board is taped onto an 8x11 sheet of paper but just on the extreme
corners.
Sharpie pens WILL NOT WORK!!! Been there and the pen will not release it's
ink efficiently.
The only pen that I found works well is: STAEDTLER LUMOCOLOR Permanent Ink
pen # 318 Yes you need to cut the pen down to the size of the original
plotter pen size or you will have too large of a torque moment and the pen
will be everywhere. Lastly; cut open an old plotter pen and slide the
permanent ink pen into the barrel so the plotter will be able to hold it.
DO NOT use an old plotter pen. It will not work even if you fill it with
ink. They are not made to write on a copper surface. Again I have tried
this and no joy.

For thoes who wish to discuss this further, pleas e-mail me off list.

Cheers,

Robert

VE3RPF

Date: Thu, 23 Aug 2001 11:29:22 -0700 (PDT)

From: Jeff <fantbb@yahoo.com>

To: GQRP@yahoogroups.com, Denis Englander <ko6gf@slip.net>, Travis Selk KM6QJ
<km6qj@pacbell.net>, qrp qrp <qrp-l@lehigh.edu>

Subject: [105555] Re: [GQRP] G5RV alternative ?

Message-ID: <20010823182922.10835.qmail@web10008.mail.yahoo.com>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

I modeled a 44 doublet fed with 300 ohm twinlead versus a half size G5RV on EZNEC and was kinda surprised at the results. Now I have been building and using the half sized G5RV for a numbers of years and it has always done a good job for me. When I saw the 44 foot doublet bandied about on the QRP mailing list I thought it couldn't be as good as my half size G5RV. Well EZNEC showed that it in fact it was just about the same. Slightly less gain on 10 to 20 meters though neither antenna was great on 40 meters to say the least.

The end result of all this if you don't have any ladder line handy just build the 44 foot doublet and feed it with twinlead. You will have just about the same performance.

73!

Jeff

=====

AB6MB

NorCal QRP Club #65, QRP-L #1780, ARCI 10071

Radical FIST Member 6798

Do You Yahoo!?

Make international calls for as low as \$.04/minute with Yahoo! Messenger

<http://phonecard.yahoo.com/>

Date: Thu, 23 Aug 2001 14:38:34 -0400
From: "ZOOM" <kandrparker@sympatico.ca>
To: "Kanalz, Karl" <Karl.Kanalz@allegiancetelecom.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [105556] Re: Pens In H-P Plotters (was: Iron on schematics)
Message-ID: <009a01c12c02\$d13d5960\$3294fea9@robertpa>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Agreed! That was my point! Great for spot marking but not good for plotter applications on copper.

Go with the Lumocolor. Note must be a permanent marker!

----- Original Message -----

From: "Kanalz, Karl" <Karl.Kanalz@allegiancetelecom.com>
To: <kandrparker@sympatico.ca>; "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Thursday, August 23, 2001 2:09 PM
Subject: Pens In H-P Plotters (was: Iron on schematics)

> Sanford "Sharpie" pens may not work in a
> "plotter-direct-to-copper-board" application, but
> they DO work as a resist-ink pen on copper PC
> boards quite well (I've used them many, many times,
> both the "micro tip" and "fine tip" versions).

>

> Karl K - W8TIF
> McKinney, Texas

>

> -----Original Message-----

> From: ZOOM [SMTP:kandrparker@sympatico.ca]
> Sent: Thursday, August 23, 2001 1:10 PM
> To: Low Power Amateur Radio Discussion
> Subject: Re: Iron on schematics

>

> Here is the way I do it for best results!
> PCB board is taped onto an 8x11 sheet of paper but just on the extreme
> corners.

> Sharpie pens WILL NOT WORK!!! Been there and the pen will not release
> it's

> ink efficiently.

> The only pen that I found works well is: STAEDTLER LUMOCOLOR Permanent
> Ink

> pen # 318 Yes you need to cut the pen down to the size on the original
> plotter pen size or you will have too large of a torque moment and the pen
> will be everywhere. Lastly; cut open an old plotter pen and slide the

> permanent ink pen into the barrel so the plottere will be able to hold it.
> DO NOT use an old plotter pen. It will not work even if you fill it with
> ink. They are not make to write on a copper surface. Again I have tried
> this and no joy.
> For thoes who wish to discuss this further, pleas e-mail me off list.
> Cheers,
> Robert
> VE3RPF

Date: Thu, 23 Aug 2001 14:39:09 EDT
From: ARDUJENSKI@aol.com
To: fantbb@yahoo.com, qrp-1@lehigh.edu
Subject: [105557] Re: [GQRP] G5RV alternative ?
Message-ID: <ff.b19ae5c.28b6a7cd@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Jeff

Thanks for sharing those results. It also says that if you need to feed with
coax into the shack you won't lose much whether 44ft doublet or 1/2 size G5RV
if I am reading you right--Alan KB7MBI

Date: Thu, 23 Aug 2001 14:51:40 -0700
From: "Dave Benson" <nn1g@earthlink.net>
To: <aa4lr@arrl.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105558] Re: Where to find a 40673?
Message-ID: <002601c12c1d\$cc87a540\$cee4d73f@pavilion>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

There's a functional equivalent for the applications we put the 40673 to-
a pair of transistors in the cascode configuration- the lower one a JFET
and the upper an NPN. The NPN base can be either AC-grounded to use the
cascode pair as an amplifier or can be driven with a local oscillator to
serve as a mixer.

73- Dave, K1SWL

-----Original Message-----

From: Bill Coleman <aa4lr@arrl.net>

To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Date: Thursday, August 23, 2001 10:58 AM
Subject: Re: Where to find a 40673?

Why not? Why have people stopped making these devices? What has replaced them?

...

Date: Thu, 23 Aug 2001 14:57:11 -0400 (EDT)
From: Frank Brickle <brickle@pobox.com>
To: Jeff <fantbb@yahoo.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [105559] Re: [GQRP] G5RV alternative ?
Message-ID: <Pine.BSI.4.05L.10108231454210.11702-100000@pluto.njcc.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

> The end result of all this if you don't have any
> ladder line handy just build the 44 foot doublet and
> feed it with twinlead. You will have just about the
> same performance.

Yup. I put up exactly that configuration as a Field Day improvisation. It worked well enough that I haven't taken it down yet and am using it for all home QRP activities.

Probably won't survive the late September weather, though.

Frank
AB2KT

Date: Thu, 23 Aug 2001 15:21:16 -0400
From: "w8diz" <w8diz@fpqrp.com>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [105560] Varactor MVAM109
Message-ID: <010b01c12c08\$c8604f40\$39d81b41@cinci.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Gang,

I have access to several hundred MVAM109 varactor diodes at \$2 each.

Any interest out there for these parts?

Spec is 30 pF at 9 volts and 450 pF at 1 volt

72 & "oo's" - Dieter (DIZ) Gentzow - W8DIZ - Loveland, Ohio
Clermont County - EM79uf - near Cincinnati; 39.218N - 84.305W
SOC-8 DLQRPAG-1454 ARCI-10226 ARS-781 QRPL-1998 10X-9389 CATT-26
FP#-1 <http://home.cinci.rr.com/w8diz> & <http://kitsandparts.com>

Date: Thu, 23 Aug 2001 15:20:38 EDT
From: ARDUJENSKI@aol.com
To: qrp-1@lehigh.edu
Subject: [105561] Potting Material?
Message-ID: <e6.1a2ea56b.28b6b186@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

I am interested in making a few antenna connectors that would be watertight. For example one would be coax S0239 mated to a connector for ladderline. I plan to mount in PVC fitting. Is there a preferred epoxy / resin to use or just what is available in hardware stores?

Alan KB7MBI

Date: Thu, 23 Aug 2001 15:26:36 -0400
From: "Hartwell, Martin E, NLCIO" <mehartwell@att.com>
To: "'qrp-1@lehigh.edu'" <qrp-1@lehigh.edu>
Subject: [105562] For Sale
Message-ID: <CE96E7BD5D14DE4DB6FCEA40EA05517E0372A3@OCCLUST01EVS1.ugd.att.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Hi

I have an unbuilt Ten-Tec T-Kit module I want to sell.

NO.1054 4 band Shortwave Reciever never opened.

\$20.00 and I will pay shipping USPS ConUS.

Marty kd8bj

Date: Thu, 23 Aug 2001 15:34:13 -0400
From: Russ Hines <wb8zcc@one.net>
To: plburbank@kih.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [105563] Re: 1 volt challenge
Message-ID: <3B855AB5.EF5A0058@one.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

A 1 volt challenge is REALLY a challenge. With the voltage drop across a couple of junctions, your supply disappears. ;-)

Many times, 12 volts has been a challenge to me. That notwithstanding, what do you think about a 3.3 volt challenge? That at least would give some of us a fighting chance. ;-)

73,
Russ Hines
WB8ZCC

Pete Burbank wrote:

>
> Gang,
> I haven't heard much about the one volt challenge lately. I guess that it
> is one of those "back of the stove"
> projects. Actually I think a 1.5 volt challenge would make more sense. Or
> maybe 1.35 or 1.2 for less
> common batteries.
> 73 Pete NV4V

Date: Thu, 23 Aug 2001 19:36:57 +0000
From: "Leon Heller" <leon_heller@hotmail.com>
To: aa4lr@arrl.net, qrp-1@Lehigh.EDU
Subject: [105564] Re: Where to find a 40673?

Message-ID: <F169ezf9CIElR3n4DVv00012bc7@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

>From: Bill Coleman <aa4lr@arrl.net>
>Reply-To: aa4lr@arrl.net
>To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
>Subject: Re: Where to find a 40673?
>Date: Thu, 23 Aug 2001 13:57:54 -0400
>
>On 8/9/01 12:03 PM, Mark J. Dulcey at mark@buttery.org wrote:
>
> >At this point, all dual-gate MOSFETs are NOS; nobody is
> >making them any more. (I'm not sure anyone is even making depletion-mode
> >single-gate MOSFETs at this point.)
>
>Why not? Why have people stopped making these devices? What has replaced
>them?

They are still made by Temic. The BF9xx range is
easy to get hold of, in Europe, at any rate.

Leon

--

Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon_heller@hotmail.com
My web page: http://www.geocities.com/leon_heller
My low-cost Altera Flex design kit: <http://www.leonheller.com>

Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>

Date: Thu, 23 Aug 2001 16:37:58 -0300
From: "Steve .. k8pz" <k8pz@earthlink.net>
To: w8diz@fpqrp.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [105565] Re: Varactor MVAM109
Message-ID: <3B855B96.8010701@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

YUP! Put me down for a dozen or so. I trust these will be listed on kitsandparts if I decide I need more?

Thanks
72 es 00
Steve .. -183

w8diz wrote:

> Hi Gang,
>
> I have access to several hundred MVAM109 varactor diodes at \$2 each.
>
> Any interest out there for these parts?
>
> Spec is 30 pF at 9 volts and 450 pF at 1 volt
>
> 72 & "oo's" - Dieter (DIZ) Gentzow - W8DIZ - Loveland, Ohio
> Clermont County - EM79uf - near Cincinnati; 39.218N - 84.305W
> SOC-8 DLQRPAG-1454 ARCI-10226 ARS-781 QRPL-1998 10X-9389 CATT-26
> FP#-1 <http://home.cinci.rr.com/w8diz> & <http://kitsandparts.com>
>
>
>
>

Date: Thu, 23 Aug 2001 19:42:59 +0000
From: "Leon Heller" <leon_heller@hotmail.com>
To: leon_heller@hotmail.com, qrp-1@Lehigh.EDU
Subject: [105566] Re: Where to find a 40673?
Message-ID: <F205dkSmLAztxc1o8yf00012a93@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Sorry. Temic MOSFETs are now made by Vishay:

<http://www.vishay.com/docs/datasheets/bf961.html>

Leon

--

Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon_heller@hotmail.com

My web page: http://www.geocities.com/leon_heller
My low-cost Altera Flex design kit: <http://www.leonheller.com>

Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>

Date: Wed, 22 Aug 2001 23:33:28 -0300
From: "Dave Marling" <dbm@klis.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105567] Re: HDD disaster
Message-ID: <000001c12c0d\$085a09c0\$c9aae2d1@klis.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> Anybody have any ideas?

I use "Drive Image" by POWERQUEST. Easy to use.

Another that I've used in the past is "Disk2Disk". This one lets you restore anything from a single file to the entire hard drive.

Both allow for spanning of CDs to store more than the 700mb limit of a single disk.

Dave
VE1VQ

Date: Thu, 23 Aug 2001 15:51:19 -0400
From: Pete Burbank <plburbank@kih.net>
To: n6wg@earthlink.net, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105568] Re: FOX--N6WG and NW7DX tonight
Message-ID: <5.0.2.1.0.20010823154332.00acbae0@KIH.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 10:31 AM 8/23/2001 -0700, Bob Tellefsen wrote:
>Last minute reminder, folks.

>N6WG around 14061, NW7DX around 14055.
>Fun starts at 0200 UTC Friday (Thursday evening local time 7-9 Pacific, 8-10
>Mountain, 9-11 Central, and 10-12 Eastern)
>Exchange is RST STATE NAME POWER.
>We really want your business. Come and get us.
>73 and see you in the Hunt.
>Bob N6WG
>The Golden Fox
We be der..... Watch for the Rats*.We have been needing some long skip!
73 Pete NV4V Ky
*Marshall calls us the RATZ

Date: Thu, 23 Aug 2001 13:58:16 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: <qrp-l@lehigh.edu>
Subject: [105569] Power Supply
Message-ID: <Pine.LNX.4.33.0108231347050.2871-1000000@localhost.localdomain>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

At the Walmart coffee monday last w5umq mentioned that All Electronics had a wall wort power supply that would make 12 volts DC at 2.5 Amps! I went home and found them on the web page and ordered 3. They arrived today and I tested them.

The open circuit voltage is 11.9 Volts. At a full 10 watts out of my suped up Ten Tec Argonaut the voltage was 11.8 volts. I liatened and on receive on 80 meters I could hear noise that didn't wiggle the s meter from the power supply. With an antenna attached the band noise covered up the power supply noise.

This \$10.00 power supply is perfect for a Yaseu 817 or any other QRP radio. Put this and the rig in your carry-on luggage. Here or in europe this supply will make all the DC you need. That's right, 100-240 volts ac 47-63 Hz input so it works anywhere!

--
Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Thu, 23 Aug 2001 16:16:46 -0400
From: "Hartwell, Martin E, NLCIO" <mehartwell@att.com>
To: "'qrp-l@lehigh.edu'" <qrp-l@lehigh.edu>
Subject: [105570] Ten-Tec receiver kits sold
Message-ID: <CE96E7BD5D14DE4DB6FCEA40EA05517E0372A7@OCCLUST01EVS1.ugd.att.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Hi

I had several responses real fast.
Wow, if Ten-Tec ever needed cash quick they sure could
flood the market.

Marty

Date: Thu, 23 Aug 2001 16:15:59 -0400
From: Ken Newman <N2CQ@citnet.com>
To: epaqrp-l@lehigh.edu, QRP-L@lehigh.edu, njqrp@njqrp.org, n9avg@amsat.org
Subject: [105571] [CONTEST]QRP Contest Calendar Aug 23/31
Message-ID: <3.0.6.32.20010823161559.008b65f0@mail.citnet.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

~~~~~  
QRP CONTEST CALENDAR

August 23-31, 2001

~~~~~  
Summer Fox Hunts - 20 M CW QRP - Fri 0200z - July & August

Details: <http://www.mtechnologies.com/cqc/sfox/index.htm>

~~~~~  
Summer CUB Fox Hunts - 20M CW QRP - Wed 0200z - July 4 thru Sep 5

Details: <http://www.wulfden.org/SummerCubFox/>

~~~~~  
TOEC WW Grid Contest (CW)

Aug 25 - 1200z to Aug 26 - 1200z

Rules: <http://home.online.no/~janalme/rules/toecgrid.txt>
~~~~~

Slovenia Contest Club RTTY Championship

Aug 25 - 1200z to Aug 26 - 1200z

Rules: <http://www.sk3bg.se/contest/sccrychs.htm>  
~~~~~

W/VE Island Contest

Aug 25 - 1600z to Aug 26 - 2359z

Rules: <http://www.eng.mu.edu/usislands/usvetest.html>
~~~~~

Hawaii QSO Party (CW/SSB) ... QRP Category

Aug 25 - 1600z to Aug 26 - 2200z

Rules: <http://home.online.no/~janalme/htmlrules/qsohi.html>  
~~~~~

Ohio QSO Party (CW/SSB) ... QRP Category

Aug 25 - 1600z to Aug 26 - 0400z

Rules: <http://www.qsl.net/mrrc/oqp.html>
~~~~~

South Dakota QSO Party (CW/SSB)... QRP Category

Aug 25 - 1600z to Aug 26 - 2200z

Rules: <http://home.online.no/~janalme/rules/qsosd.txt>

~~~~~  
BUBBA Summer QRP Sprint *** QRP CONTEST! ***

Aug 25 - 1800z to 2200z

Rules: <http://www.extremezone.com/~nk7m/>

~~~~~  
Anyone may use this "QRP Contest Calendar" for your website, newsletter,  
e-mail list or other media as you choose.  
(Include a credit to the source of this material of course.)

72 de  
Ken Newman - N2CQ

N2CQ@ARRL.NET           <http://www.NJQRP.org>  
                          <http://www.N3EPA.org>  
                          <http://www.qsl.net/cqrp/contests.html>

-----  
Date: Thu, 23 Aug 2001 16:17:16 -0400  
From: Pete Burbank <plburbank@kih.net>  
To: ARDUJENSKI@aol.com, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [105572] Re: Potting Material?  
Message-ID: <5.0.2.1.0.20010823155620.00ad04a0@KIH.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 03:20 PM 8/23/2001 -0400, ARDUJENSKI@aol.com wrote:  
>I am interested in making a few antenna connectors that would be watertight.  
>For example one would be coax S0239 mated to a connector for ladderline. I  
>plan to mount in PVC fitting. Is there a preferred epoxy / resin to use or  
>just what is available in hardware stores?  
>  
>Alan KB7MBI

Alan  
Epoxy seems to be not very waterproof.  
During some heart dimension measurements at 3.4 MHZ we discovered that the  
transducers  
(epoxy coated) had much less crosstalk when given a final coat of silicone  
grease over the epoxy.



These were some pretty low level measurements in a saline solution.  
I would suggest the RS products or anything by Devcon coated with silicon grease  
such as DC-4 or 3.  
The clear heatsink stuff should work well also...not the white stuff.  
73 Pete NV4V.....CBET

-----  
Date: Thu, 23 Aug 2001 16:30:26 -0400  
From: "David Porter" <aa3ur@home.com>  
To: <myetsko@insydesw.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [105573] Re: Slingshots  
Message-ID: <00cf01c12c12\$7222c7c0\$927ba8c0@jamison1.pa.home.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

It is definitely more than one shot. Although the used line is not re-usable. I'm not sure how many you can get out of it. Deer season is approaching, so it should be available without too much trouble. I comes in a black polyethylene tube with a cap on it. When I asked George where he got it, he couldn't remember.

----- Original Message -----

>  
> Your deer tracker would be excellent, but it's probably a 'one shot'  
> kind  
> of thing, and I'll bet that won't appeal to many people.  
>  
> Mike  
>  
> ----- Original Message -----  
> From: David Porter <aa3ur@home.com>  
>  
>  
> > Rather than a reel, there is a nice thing available for archers called  
> (I  
> > think) Deer Tracker. it is a tube of very light, but very strong line  
> that  
> > is payed from the hollow core of the coil of line. There is almost no  
> added  
> > friction or drag. I used it at FD this year and just let it sit on

> the  
> > ground. No problem.  
> >  
> > I was just the fool using the slingshot, not the owner. I believe  
> that  
> > George Heron, N2APB, is the party it belongs to.  
> >  
> > David Porter  
> > aa3ur@home.com  
> > AA3UR  
>  
>

-----  
Date: Thu, 23 Aug 2001 14:35:28 -0600 (MDT)  
From: "Karl F. Larsen" <k5di@zianet.com>  
To: <qrp-1@lehigh.edu>  
Subject: [105574] Beacon data  
Message-ID: <Pine.LNX.4.33.0108231430390.2940-1000000@localhost.localdomain>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

From the DX beacon data on 20 meters, California is a weak signal here in South-Central New Mexico at 18:30 Z. The 100 MWatt dash is under noise to a 6 element beam at 60 feet.

There have been 4 flares on the sun but they are small. I fear another CME is brewing.

--  
Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

-----  
Date: Thu, 23 Aug 2001 16:46:38 -0400  
From: "Tim A. King Jr." <iflyos@hotmail.com>  
To: qrp-1@Lehigh.EDU  
Subject: [105575] Re: [GQRP] G5RV alternative ?  
Message-ID: <F87MMUh4nElKdRsUdig00010704@hotmail.com>  
Mime-Version: 1.0  
Content-Type: text/plain; format=flowed

Not exactly qrp related, but here goes anyway.....how much power will standard 300 ohm tv twinlead handle? As a feedline or as an antenna (Doublet)?

72 & TIA

Tim A. King, Jr.  
KG4MQD  
Safety Officer, Hobby Park R/C Aircraft Club  
Winston Salem, NC  
AMA# 578668

-----Original Message Follows-----

From: Jeff <fantbb@yahoo.com>  
Reply-To: fantbb@yahoo.com  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: Re: [GQRP] G5RV alternative ?  
Date: Thu, 23 Aug 2001 11:29:22 -0700 (PDT)

I modeled a 44 doublet fed with 300 ohm twinlead versus a half size G5RV on EZNEC and was kinda surprised at the results. Now I have been building and using the half sized G5RV for a numbers of years and it has always done a good job for me. When I saw the 44 foot doublet bandied about on the QRP mailing list I thought it couldn't be as good as my half size G5RV. Well EZNEC showed that it in fact it was just about the same. Slightly less gain on 10 to 20 meters though neither antenna was great on 40 meters to say the least.

The end result of all this if you don't have any ladder line handy just build the 44 foot doublet and feed it with twinlead. You will have just about the same performance.

73!

Jeff

=====

AB6MB  
NorCal QRP Club #65, QRP-L #1780, ARCI 10071  
Radical FIST Member 6798

-----  
Do You Yahoo!?

Make international calls for as low as \$.04/minute with Yahoo! Messenger  
<http://phonecard.yahoo.com/>

-----  
Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>

-----  
Date: Thu, 23 Aug 2001 17:07:51 -0400  
From: George Heron <[gheron@safenet-inc.com](mailto:gheron@safenet-inc.com)>  
To: "'Low Power Amateur Radio Discussion'" <[qrp-1@Lehigh.EDU](mailto:qrp-1@Lehigh.EDU)>  
Subject: [105576] RE: Slingshots  
Message-ID: <3E89A18A51CBD411BD1B0002A507C88BB4AB89@MAX>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"

The Deer Tracker spooling device was purchased at some sporting chain store ("Dick's"?) in the NJ/MD area. If I recall, it was about \$14.95 and it's lasted at least 20 shots into the trees over the last couple of years of field operation, with no end in sight. (I'd have to look when I get home, but 3500-foot sounds familiar for the line capacity.)

73, George N2APB  
[n2apb@amsat.org](mailto:n2apb@amsat.org)

=====  
It is definitely more than one shot. Although the used line is not re-usable. I'm not sure how many you can get out of it. Deer season is approaching, so it should be available without too much trouble. I comes in a black polyethylene tube with a cap on it. When I asked George where he got it, he couldn't remember.

=====  
> Your deer tracker would be excellent, but it's probably a 'one shot'  
> kind  
> of thing, and I'll bet that won't appeal to many people.  
>  
> Mike

-----  
Date: Thu, 23 Aug 2001 17:22:10 EDT  
From: ARDUJENSKI@aol.com  
To: [gheron@safenet-inc.com](mailto:gheron@safenet-inc.com), [qrp-1@lehigh.edu](mailto:qrp-1@lehigh.edu)

Subject: [105577] Re: Slingshots  
Message-ID: <131.81f68b.28b6ce02@aol.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"  
Content-Transfer-Encoding: 7bit

Cabelas also has it called a GAME TRACKER in 2500 and 3000 ft coils. Comes with mounting apparatus--Alan KB7MBI

-----  
Date: Thu, 23 Aug 2001 14:23:40 -0700  
From: "Phinizy, William" <wphinizy@filenet.com>  
To: "QRP-1 Forum (E-mail)" <qrp-1@Lehigh.EDU>  
Subject: [105578] QRP Forum at the SW Division ARRL Convention..  
Message-ID: <C3AF5E329E21D2119C4C00805F6FF58F04B77332@hq-expo2.filenet.com>

Guys,

Just a reminder, if you are planning to attend the forum, please be sure that you e-mail Jerry Parker, WA6OWR, at qxrpradio@charter.net and ask him to make a badge for you. They will be of the usual excellent quality and the price -- as always -- will be right.

William, K6WHP

-----  
Date: Thu, 23 Aug 2001 17:32:09 EDT  
From: Drbob92031@aol.com  
To: qrp-1@lehigh.edu  
Subject: [105579] Sling shot line  
Message-ID: <9e.19449208.28b6d059@aol.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"  
Content-Transfer-Encoding: 7bit

For years I have been using the same method that the US Navy uses for wire guided torpedoes and it is so simple and it works. Cheap also. No fishing reels needed. Take a Styrofoam coffee cup. The kind that is a bit narrower at the bottom of the cup than the mouth of the cup. Start to wind you line at the lip of the cup and work toward the bottom winding around the outside of the cup. Make the turns close together. After all your line is wound onto the tapered cup place 2 or 3 pieces of Scotch tape from the first winding to the last so that the windings will not "uncoil" themselves. If the windings stay in place no need for the tape. Attach the end at the last winding to the weight in the sling shot and let the shot fly. The line will peel off the cup

as needed. If you use a waxed cup, the line comes off easier but may have a problem keeping it in place until needed.

Just a thought.

72/73 de WA2EAW.Bob

-----  
Date: Thu, 23 Aug 2001 18:03:41 EDT  
From: n5ib@juno.com  
To: qrp-1@Lehigh.edu  
Subject: [105580] HB - MH-101 SW-30+ audio stage  
Message-ID: <20010823.165630.7559.1.n5ib@juno.com>

In an effort to reduce the current drawn by a manhattan-style SW-30+ I replaced the 5532 dual op amp with an LMC662 CMOS part. Saved 6 mA.  
But....

Out of three headsets I have here, two work fine but the third puts the audio stage into an unstable oscillation. Does not occur with the 5532. The 662 data sheet says "avoid resistive loads of less than 500 ohms." The specs give typical performance for 600 ohm and for 2 K loads. So, apparently there is quite a bit of wiggle room (my headsets' DC measurement is 16 ohms - paralleled - or 65 ohms if series connected) but when you get close to the real edge small changes are important. Curiously, the culprit headset still induces the problem whether series or parallel, while the other two are fine either way.

There are a couple of suggestions in the 662 data on coping with this issue as well as capacitive loads, and I shall investigate them in time.

I'm curious if anyone has met or perhaps mastered this anomaly.

72  
Jim N5IB

PS - poplar box for this radio has been glued up and is awaiting finishing, then the front panel will be next on the agenda.

-----  
GET INTERNET ACCESS FROM JUNO!  
Juno offers FREE or PREMIUM Internet access for less!  
Join Juno today! For your FREE software, visit:  
<http://dl.www.juno.com/get/tagj>.

-----  
Date: Thu, 23 Aug 2001 18:05:08 -0400  
From: "Mark J. Dulcey" <mark@buttery.org>

To: leon\_heller@hotmail.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [105581] Re: Where to find a 40673?  
Message-ID: <3B857E14.3060208@buttery.org>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii; format=flowed  
Content-Transfer-Encoding: 7bit

Leon Heller wrote:

>  
>>  
>> >At this point, all dual-gate MOSFETs are NOS; nobody is  
>> >making them any more. (I'm not sure anyone is even making depletion-mode  
>> >single-gate MOSFETs at this point.)  
>>  
>> Why not? Why have people stopped making these devices? What has replaced  
>> them?  
  
> They are still made by Temic. The BF9xx range is  
> easy to get hold of, in Europe, at any rate.

I checked the Vishay web site... although the data on the parts is still there, the link to find order information for them gives no results. I suspect that the Temic/Vishay BF series parts (at least the dual-gate MOSFETs) are also extinct now. though they may still be available in Europe in small quantities.

So, what has replaced them??

The classic application of dual-gate MOSFETs was in mixers (and product detectors, which are really just mixers with an AF output rather than IF). By applying the RF input to one gate, and the LO to the other, you could build a simple mixer with good input-LO isolation, as well as low power consumption, reasonable noise figure, and strong signal handling good enough for casual designs. They have been replaced by Gilbert cell IC mixers in low power applications, and by diode ring mixers in high dynamic range designs. Next-generation switching mixers (currently using analog switch ICs, probably using special-purpose mixer ICs in the future) are the up and coming competition.

Aside from that, amateur designs sometimes saw dual-gate MOSFETs used as RF or IF amplifiers, or in VFOs. They are easily replaced by appropriate ICs or bipolar or JFET transistors in those applications. The future will probably also see increased use of enhancement-mode MOSFETs (VMOS, TMOS, DMOS, etc.) as another alternative.

Of course, none of this helps if you're looking for a drop-in replacement to repair an old circuit. By all means, buy one of the NOS parts for that. But, I will say once again, don't design dual-gate MOSFETs into any new designs, or undertake any new projects calling for them, unless you already have the parts on hand, and unless you don't have any plans to have other hams reproduce your design.

-----  
Date: Thu, 23 Aug 2001 15:06:02 -0700  
From: <schoon@amgt.com>  
To: <qrp-1@Lehigh.EDU>, <Drbob92031@aol.com>  
Subject: [105582] RE: Sling shot line  
Message-ID: <c=US%a=\_%p=American\_Geotech%l=AG-CALCITE-BD-010823220602Z-3246@ag-basalt-pxy.amgt.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

This is one of those times where rehashing some old, worn out subject results in finding a new way of doing something..... I'm glad this subject continued on even though some people on the list wanted the subject dropped.

72 - .mark

The wireless telegraph is not difficult to understand. The ordinary telegraph is like a very long cat. You pull on the tail in New York and it meows in Los Angeles. The wireless is the same, only without the cat.  
A. Einstein

>-----  
>From: Drbob92031@aol.com[SMTP:Drbob92031@aol.com]  
>Sent: Thursday, August 23, 2001 2:32 PM  
>To: Low Power Amateur Radio Discussion  
>Subject: Sling shot line  
>  
>For years I have been using the same method that the US Navy uses for wire  
>guided torpedoes and it is so simple and it works. Cheap also. No fishing  
>reels needed. Take a Styrofoam coffee cup. The kind that is a bit narrower at  
>the bottom of the cup than the mouth of the cup. Start to wind you line at  
>the lip of the cup and work toward the bottom winding around the outside of  
>the cup. Make the turns close together. After all your line is wound onto the



>tapered cup place 2 or 3 pieces of Scotch tape from the first winding to the  
>last so that the windings will not "uncoil" themselves. If the windings stay  
>in place no need for the tape. Attach the end at the last winding to the  
>weight in the sling shot and let the shot fly. The line will peel off the cup  
>as needed. If you use a waxed cup, the line comes off easier but may have a  
>problem keeping it in place until needed.  
>Just a thought.  
>72/73 de WA2EAW.Bob  
>  
>  
>

-----  
Date: Thu, 23 Aug 2001 17:13:29 -0500  
From: "Cla KA0GKC" <ka0gkc@arrl.net>  
To: <n5ib@juno.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [105583] Re: HB - MH-101 SW-30+ audio stage  
Message-ID: <005501c12c20\$da433de0\$0300000a@mcg.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="Windows-1252"  
Content-Transfer-Encoding: 7bit

How about an 1k to 8 ohm output transformer?

Hope this helps,

73 de Cla KA0GKC

> I'm curious if anyone has met or perhaps mastered this anomaly.  
>  
> 72  
> Jim N5IB

-----  
Date: Thu, 23 Aug 2001 18:17:48 -0400  
From: Bruce Muscolino <w6toy@erols.com>  
To: aa4lr@arrl.net  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [105584] Re: Where to find a 40673?  
Message-ID: <3B85810C.530D7BD0@erols.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Bill,

Well you're right. People have stopped making them. The technology has apparently been superseded! NYE does manufacture a replacement for the 40673 and others, I believe it's called the NTE222. Last time I looked they were between production runs with no idea when they would make more!

73

-----  
Date: Thu, 23 Aug 2001 18:28:57 -0400  
From: Bruce Muscolino <w6toy@erols.com>  
To: Drbob92031@aol.com  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [105585] Re: Sling shot line  
Message-ID: <3B8583A9.55E2EDFA@erols.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Well, well, well. It sounds like someone has read my Stealth Antenna story in QST for June 1995~ I stated I had derived the idea for my wire coil as a result of several years working with the Navy's wire guided torpedos! Attaching the wire to a strip of tape on the outside of the coil is doomed to failure! Instead place two or three strips of double sided tape on the cup and wind over them. They will hold the wire very well and release it when you make a shot. I used a plastic drinking glass for more durability. BTW, I have been using the technique since about 1982 to put up my stealth antennas!

73

-----  
End of QRP-L Digest 2290  
\*\*\*\*\*  
-----